FEB 20

DYNABULK: NEW CAR FOR BULK COMMODITIES . . . . . p. 22

FEBRUARY 20, 1967

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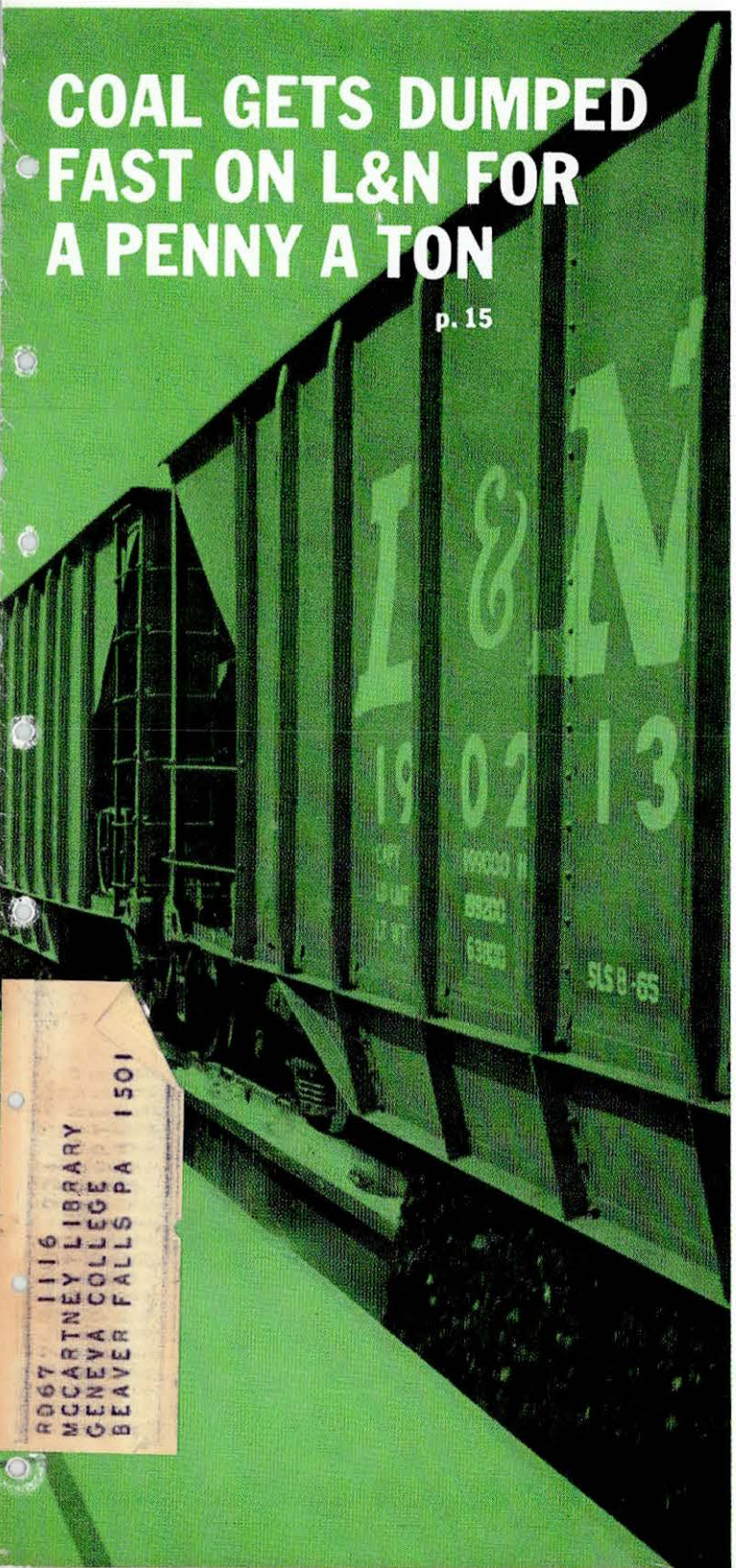
RAILWAY AGE

THE TRANSPORTATION WEEKLY



COAL GETS DUMPED FAST ON L&N FOR A PENNY A TON

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TRAINING: HOW NYC BUILDS ITS FUTURE MANAGEMENT

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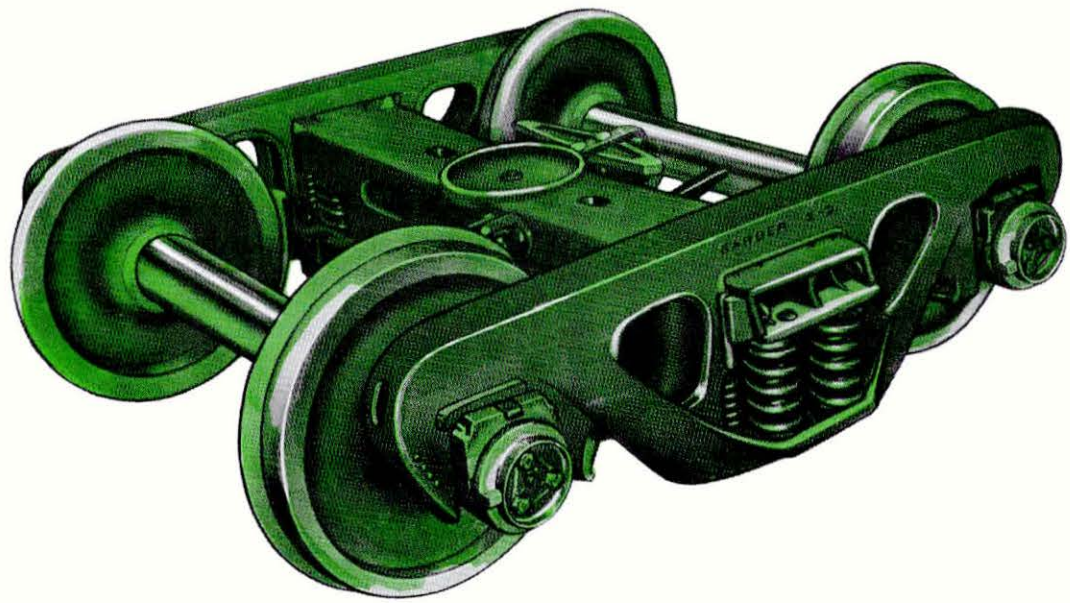

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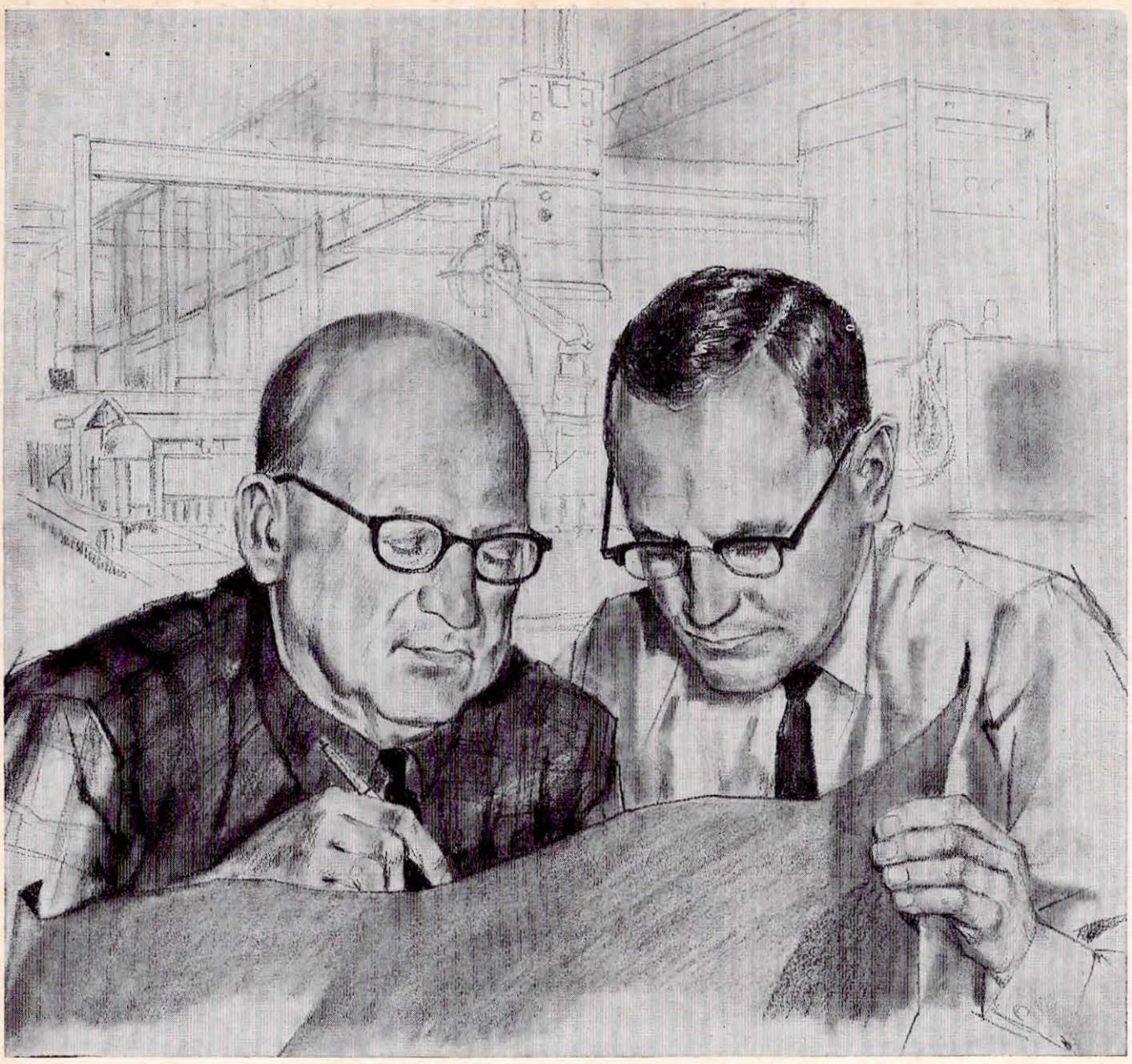

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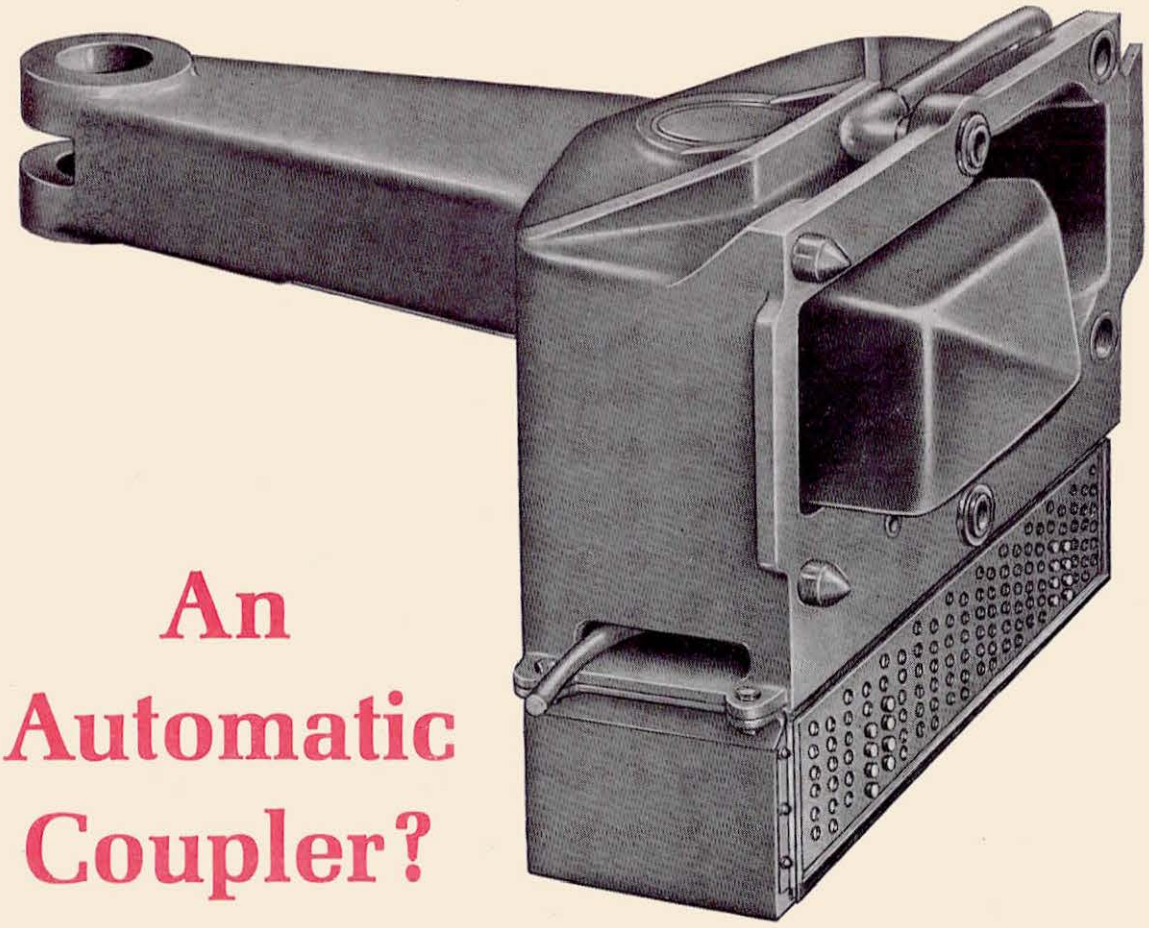

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SYMINGTON WAYNE TRANSPORTATION EQUIPMENT

RAILWAY AGE February 20, 1967 • Vol. 162, No. 7

THIS WEEK

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Automatic dumping equipment on 72-car unit trains helps the road unload coal at an hourly rate of almost 22,000 tons.

18 Training: It's a strong Central theme

Junior management trainees and other employees are active students on the New York Central.

22 Dynabulk car unloads as its lining inflates

Here's how a new pressurizing concept is used for handling a variety of powdered, granular commodities.

24 SAL new-auto traffic still booms

Basic elements in the success story are the road's many ramps, which provide fast, efficient unloading of automobiles.

25 Boyd's aim: Change amidst order

DOT's chief believes railroads are irreplaceable as bulk freight carriers and they can stay in the short-haul passenger business.

40 Viewpoint—It takes two to negotiate

Third parties to labor-management arbitration are becoming the order of the day. It's not always good.

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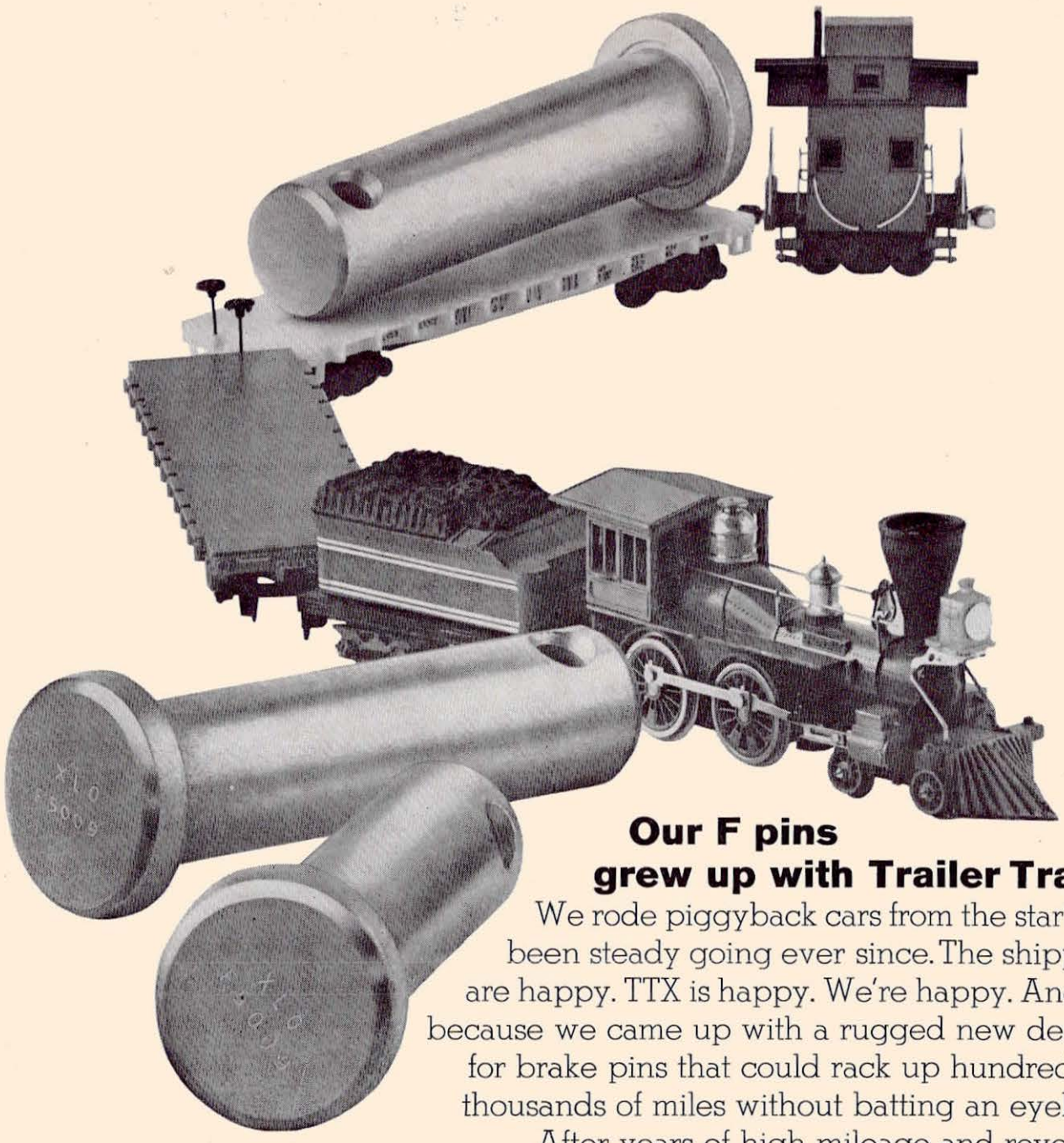

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SHORT AND SIGNIFICANT

Burlington: No longer a Frisco stockholder

Burlington, which acquired a substantial interest in Frisco last year, has sold its holdings—222,000 shares of common, or 9.3% of the outstanding stock—to Henry Crown & Co. Burlington President William J. Quinn said his road was divesting itself of its entire interest in Frisco "because of reports that other interests might attempt to use such ownership to becloud the issues" in the Great Northern Pacific & Burlington merger case, now before the ICC for reconsideration. Quinn explained that "although we think the ICC would not have been influenced by such efforts in its current reconsideration of our merger, we concluded that all doubt should be removed by acceptance of the Crown offer to acquire the stock." With the shares acquired from Burlington and prior holdings dating back some 17 years, the Crown interests are now reported to have about 16% of outstanding Frisco stock. In addition, Crown interests hold about 9% of outstanding Rock Island stock and have smaller interests in Illinois Central and Rio Grande.

●

HUD announces transit grants

The Department of Housing and Urban Development made public two grants to aid rapid transit planning. One for $666,000 goes to Seattle, to be matched by $333,000 in local funds, to continue preliminary design work for the proposed 20-mile rapid transit system. One for $73,000 goes to West Virginia University, to work with New York City Transit Authority on traffic simulation to improve scheduling effectiveness.

●

Railroad employment down

The railroads had a total of 614,552 employees in January—down 1.88% from the previous month, and 1.47% below January 1966. Employment in six of the seven job categories was down from the previous month. The exception was the transportation group embracing yardmasters, switchtenders and hostelers where employment was up 1.76%. That group was also one of two which increased as compared with January 1966. There, it was up 0.06%, the other gainer being the group embracing executives, officials and staff assistants, which was up 2.99%.

●

Soo wants better Milwaukee access

In the event of a merger of Chicago & North Western and the Milwaukee the Soo Line will press for certain conditions to be imposed by the ICC, in order to improve its access to the city of Milwaukee. Soo President Leonard H. Murray outlined these conditions in a talk before a local civic and business group: full rights to handle all types of freight between Milwaukee and all parts of the country; full-access to area industries; a shorter connection between Milwaukee freight yards and the Soo main line. A neutral terminal company would take over all switching in the district and serve the port and perhaps also lake car ferries. According to Murray, "The Soo Line's proposal will assure this area of vigorous rail competition without major capital expenditure for new plant; it will impose no new charges on the shipping public."

●

Pullman earnings hit record high in 1966

Both revenue and earnings for Pullman, Inc. and consolidated subsidiaries set a record in 1966, according to figures released last week. Profits were up 27%, figuring out to $5.72 per share on a 17% increase in gross revenues over 1965. Last year's net income amounted to $26,109,888, compared with $20,571,605 in 1965, when share earnings were $4.51. Sales and other revenues of the company totaled $776,969,746 in 1966, up from $661,381,741 in 1965.

MONDAY MORNING REPORT

To go—or not to go . . .

You're a department head. On your desk is an announcement of the next meeting of an industry association to which you belong. There's a decision to be made: go, not go, send somebody else, not send somebody else, try to participate, ignore the whole thing. What's the basis for the decision? To an increasing extent the basis is a strictly pragmatic one: What's in it for me and for my company?

A holiday—or something of value?

There are associations and there are associations. Some do things, some don't. Some meet and arrive at decisions or develop information valuable to most of the people sitting in. Some just meet, and in such cases attendance can be a vacation, surcease from cares of the job, or maybe a reward passed on from above for good and faithful service. Nobody denies the need for an occasional few days away from the desk, nobody will knock a reward that's earned, nobody can completely overlook the value that can come from pure conversation at meetings where the meeting itself is a drag. But the practical considerations have to be met—and they're becoming increasingly practical. There just isn't the time or the manpower, anymore, for companies to waste by taking their people off the job and sending them to affairs of little value.

There are good crowds—and no crowds at all

All of this, of course, is putting new—and in some cases—heavy pressures on association leadership. In years gone by, perhaps there weren't such problems. Meetings were scheduled and good turnouts came almost automatically. Today, some groups are still getting crowds. A recent Transportation of America institute, for example, played to a full house. Overflow crowds have come to be standard at the four-time a year meetings of the National Railroad Piggyback Association. But certain other organizations are having troubles: you walk into the room, and your first question is, "Where *is* everybody?"

Who succeeds? Who fails?

As most observers would point out, there are a variety of reasons why one group clicks and another doesn't. Meetings of technical organizations usually come off pretty well: The programs have a "can't-miss" tag for those in the field. Meetings of groups operating in a growth area are similarly blessed—the NRPA, for instance. Programs which are varied in style and content to keep up with the times tend to attract the crowds and the participation. Conversely, programs which try to attack 1967 problems with a 1920 format don't make it.

1967 is one thing—the future's another

Right now, the program planning is under way for the 1967 American Railway Progress Exposition. Attendance at organizational meetings, this time around, shouldn't be too much of a worry—not with $50 million worth of new equipment on display in what may be the greatest railroad product show ever put together. Still, top level people in several organizations are deeply concerned with the value of the programs they'll be putting forth. They're deeply concerned and right now they're trying to do something about it. An Exposition, after all, can only be counted upon to hypo the interest once every four years—and under current circumstances, an organization that fails to provide something of value may not long remain an organization.

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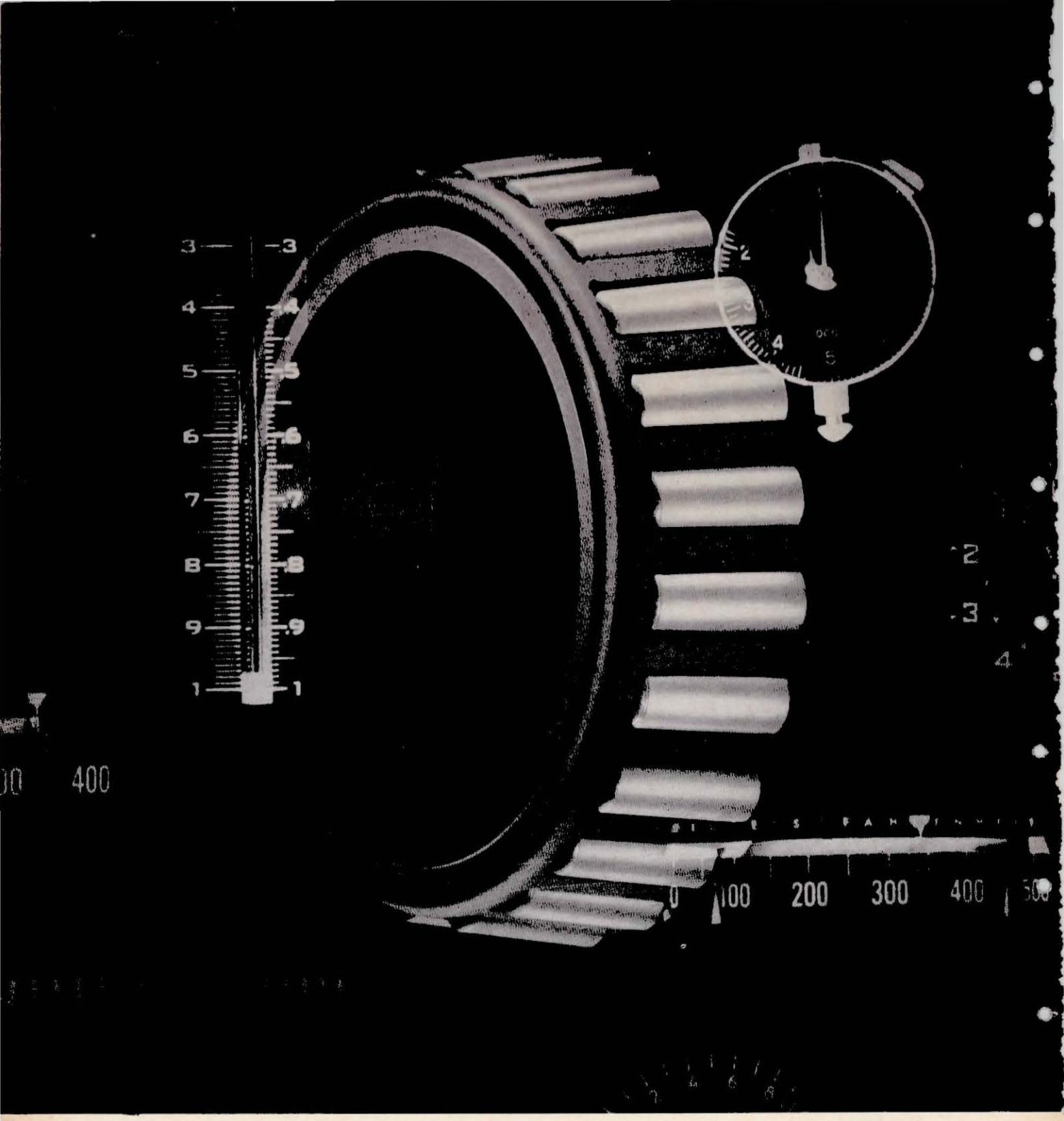

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WEEK AT A GLANCE

New Jersey to upgrade mass transit

Governor Richard Hughes of New Jersey announced at the beginning of the year that he would seek new funds for expanding aid to mass transit. In his budget message to the legislature last week, he spelled out some of the details.

Funds recommended for commuter roads in FY 1967-68 are as follows:

—For the initial phase of rehabilitating and electrifying the New York & Long Branch from South Amboy to Little Silver, $8.9 million.

—For purchase of new cars to be leased to the Erie Lackawanna, $1.8 million.

—For contribution to the PRR's upgrading of line between Newark and Trenton, $1 million.

Other contributions would be made to developing high-speed buses and construction of a new bus-rail terminal to replace the present PRR station in Trenton.

Over-all, the plan is part of a ten-year $300 million master plan for upgrading mass transportation. The plan is predicated on the assumption that the state could raise $100 million, and the federal government match it with $200 million, over the long range.

GO transit is a go-go in Canada

North America's newest rail commuter operation, over a 60-mile stretch of the Canadian National's main line through Toronto, Ont., will begin May 23. Government of Ontario (GO) transit also announced that between May and September there will be three increases in schedule frequency to produce the service level (20 minutes at peak) which area planners see as vital in relieving pressures on the Metropolitan Toronto highway network. A subsidy of up to $2 million annually by the Province is making possible fares which are aimed at luring auto commuters out of their vehicles. The multiple-ride fare-structure is based on a three and one half cent-per-mile rate. There will be no fee for commuter parking at GO Transit stations, of which there are 15 between Hamilton—39 miles west of Toronto—and Pickering—21 miles east.

CN will be the operating agency for the new service. The Province is making a capital investment of $9.3 million in new stations, cars, and locomotives and in track and signal system changes. Hawker-Siddeley is building 49 aluminum coaches, each seating 94 passengers. Forty of the cars will be arranged for push-pull operation and will be powered by eight 3000-hp General Motors Diesel locomotives. Nine cars will be self-propelled with undercar power plants. All cars will have 4½-foot extra-wide vestibules at both ends with powered doors to minimize station loading delays. Special bucket seats, air conditioning and wide vision windows will be among the auto-competitive features of the new cars.

Ontario Premier John Robarts told Parliament that success of the new operation could mean a substantial reduction in highway construction costs. If all the people the new operation will be capable of carrying—up to 12,000 per hour—would drive during rush hour, ten new highway lanes would be required.

CP steps up car tracing

Starting next month, Canadian Pacific will have in service a computerized car tracing system to keep track of its 80,000 different freight cars. Heart of the system is the data processing center in Montreal headquarters, where IBM System 360 equipment keeps track of all movements on a round-the-clock basis. Five centers across the country will be linked to the center, and car locations will be flashed on teletypes in seconds. Some time next year, television screens will be introduced, to display answers visually. Still further expansion of the service is foreseen; subscribers to CP-CN Telecommunications would be able to dial directly into the computer and get their own answers on the spot.

NH: Turning a loss into a gain

New York Central's vice president-finance, Walter R. Grant, calculated last week that New Haven creditors would have had $9 million in income instead of their actual $15 million loss if the Penn-Central merger and acquisition of the New Haven had been effected Dec. 31, 1965.

Grant said that on Dec. 31, 1965, payment of 950,000 newly issued shares by Penn-Central to the New Haven trustees would have represented approximately 4% of outstanding Penn-Central stock. On a consolidated basis combined net income of PRR and NYC for the year ended Dec. 31, 1965 was $124,316,000 (for the year ended Dec. 31, 1966 it was $155,824,500).

"After adding the $81 million of anticipated merger savings and deducting the $8,476,000 estimated deficit of the New Haven operations when included in the Penn-Central system, such combined income is $196,840,000," he said.

He pointed out that New Haven creditors would have exchanged their $15 million yearly loss operation for a 4% interest in a $196,840,000 net income operation together with Penn-Central bonds in the principal amount of $23 million on which income of $1,150,000 per year will be received. The $15 million loss would turn into approximately $9 million of income. In addition, the creditors would have received $8 million in cash even if no upward adjustments in the purchase price were required, Grant said.

GUS WELTY'S LINES ON LABOR

WELTY

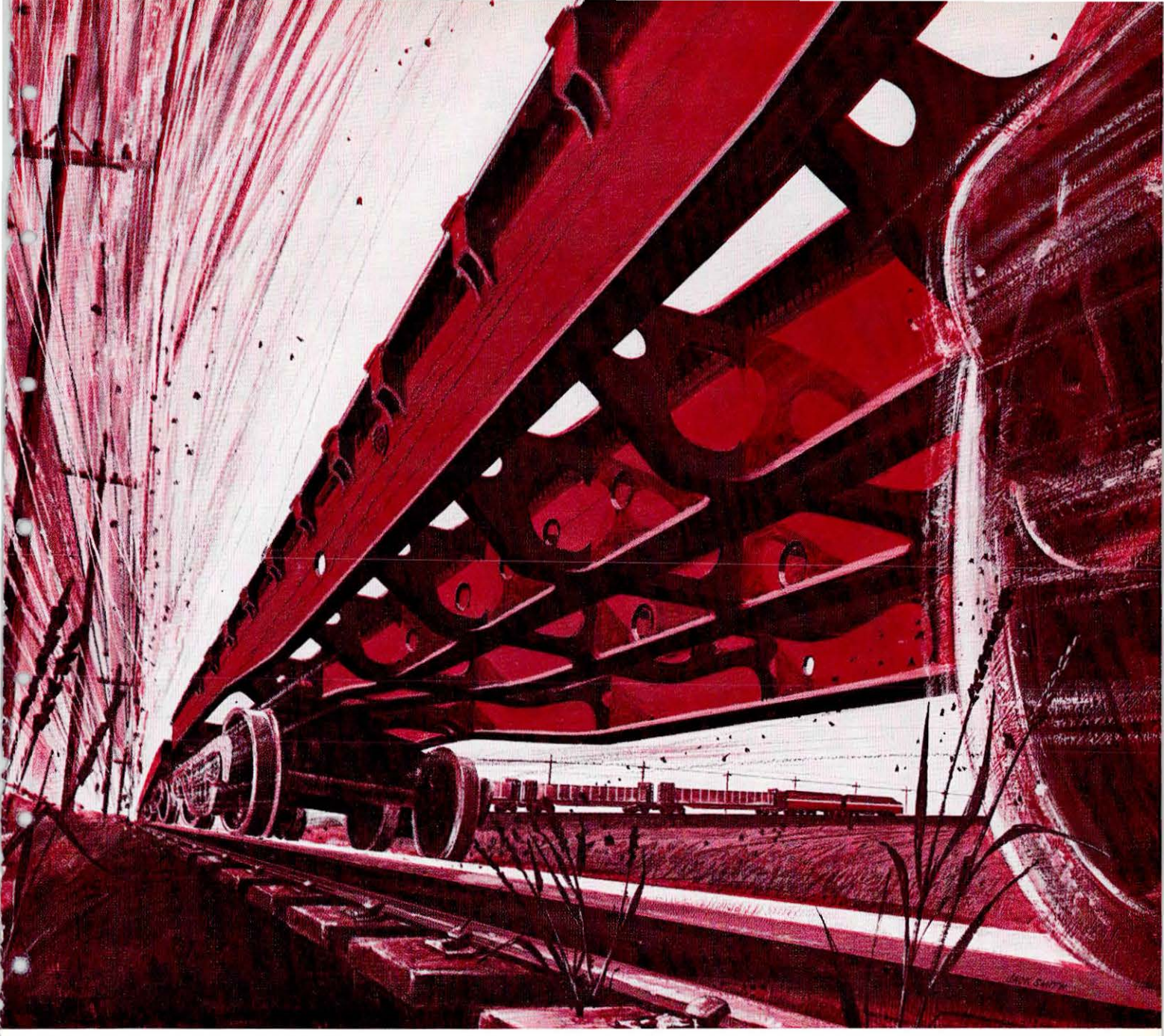
TO PARAPHRASE Buick's well-known ad slogan, "When stickier lawsuits are glued together, the railroads and the brotherhoods will furnish the glue." During the work-rules dispute a few years ago, there was a standing joke among public-relations men and reporters handling the story: One of the group was to enroll in a correspondence course in law—and then circulate the books among his fellows. Now, nothing much has changed. The work-rules case has been more-or-less settled—but a law degree would still come in mighty handy. The most recent case-in-point: The "national-handling" case involving the Brotherhood of Railroad Trainmen, which will have a surprise ending only if the ending doesn't involve the U.S. Supreme Court. These days, a case just doesn't seem to be a case unless it gets the attention of the nine justices in Washington.

CREW-CONSIST is the issue at the root of the current BRT case. To sum it up as briefly as possible, the union wants local handling, on a property-by-property basis; and the carriers—three were involved in the initial action—want national handling. A U.S. District Court judge has ruled in favor of the railroads; the BRT has filed the predictable appeal.

AS THE TRAINMEN SEE IT, the District Court opinion "could have grave consequences for all rail unions." As the BRT also sees it, the carriers have a "singular motive"—which is to compel national handling "so as to create a national emergency that will give them an excuse to seek more compulsory arbitration."

BROTHERHOOD SPOKESMEN have learned to be wary of optimism, where court actions are concerned. Still, there was a feeling that this was a case in which the organization had strong and powerful arguments on its side. After all, the BRT could show that it had, in fact, negotiated consist agreements on 34 roads. It could demonstrate that individual railroads, on occasion, have declined to join in national handling of various disputes. It could point out that crew-consist matters, rather generally, have been negotiated locally in the past. But, with all of this, the BRT lost the case, and it remains to be seen whether the story will be any different when other judges in other courts hear the arguments.

THERE ARE SOME, in rail labor, who look darkly upon the courts. There are some who seem to feel that management always has the edge with the judiciary, and that martyrdom is about the best a union petitioner can get. This, of course, is nonsense—and to its credit, the BRT makes no such claims. Come to think of it, the BRT also offers one of the better refutations of the "courts-are-against-us" argument. Column 1 of a recent issue of Trainmen News reported the adverse decision in the crew-consist case. Column 3, in type just as large, reported on a Supreme Court decision—under the headline "Solid Victory for BRT." So be it.



What happens to GSI Cast Steel Underframes after 10, 20, or 30 years of service? Nothing. They just keep on going, going, going, going, going, going, going, going, going, going, goi

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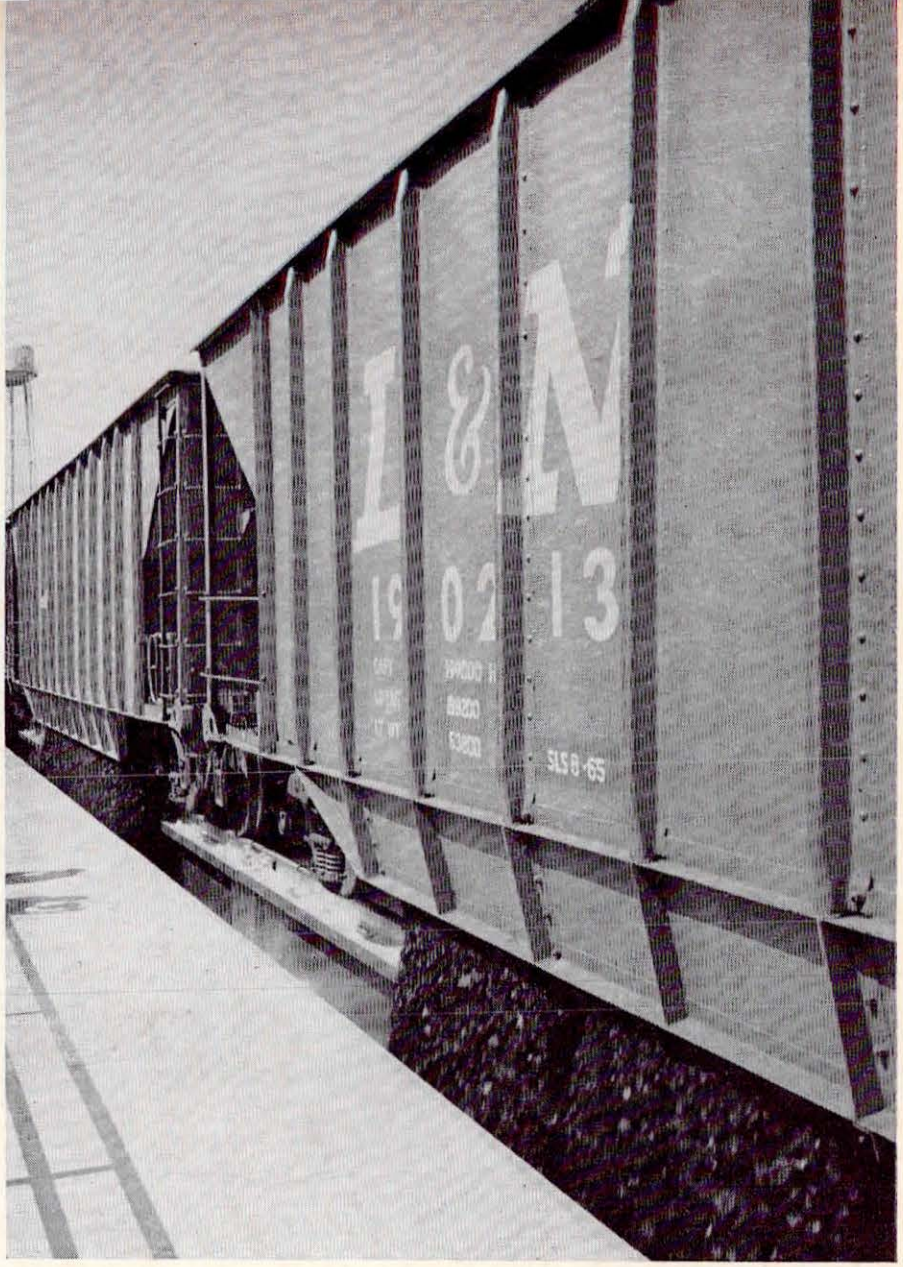


COAL DROPS OUT of L&N unit train at TVA's Bull Run generating station at the great rate of 21,600 tons an hour.

L&N dumps coal fast—for one penny a ton

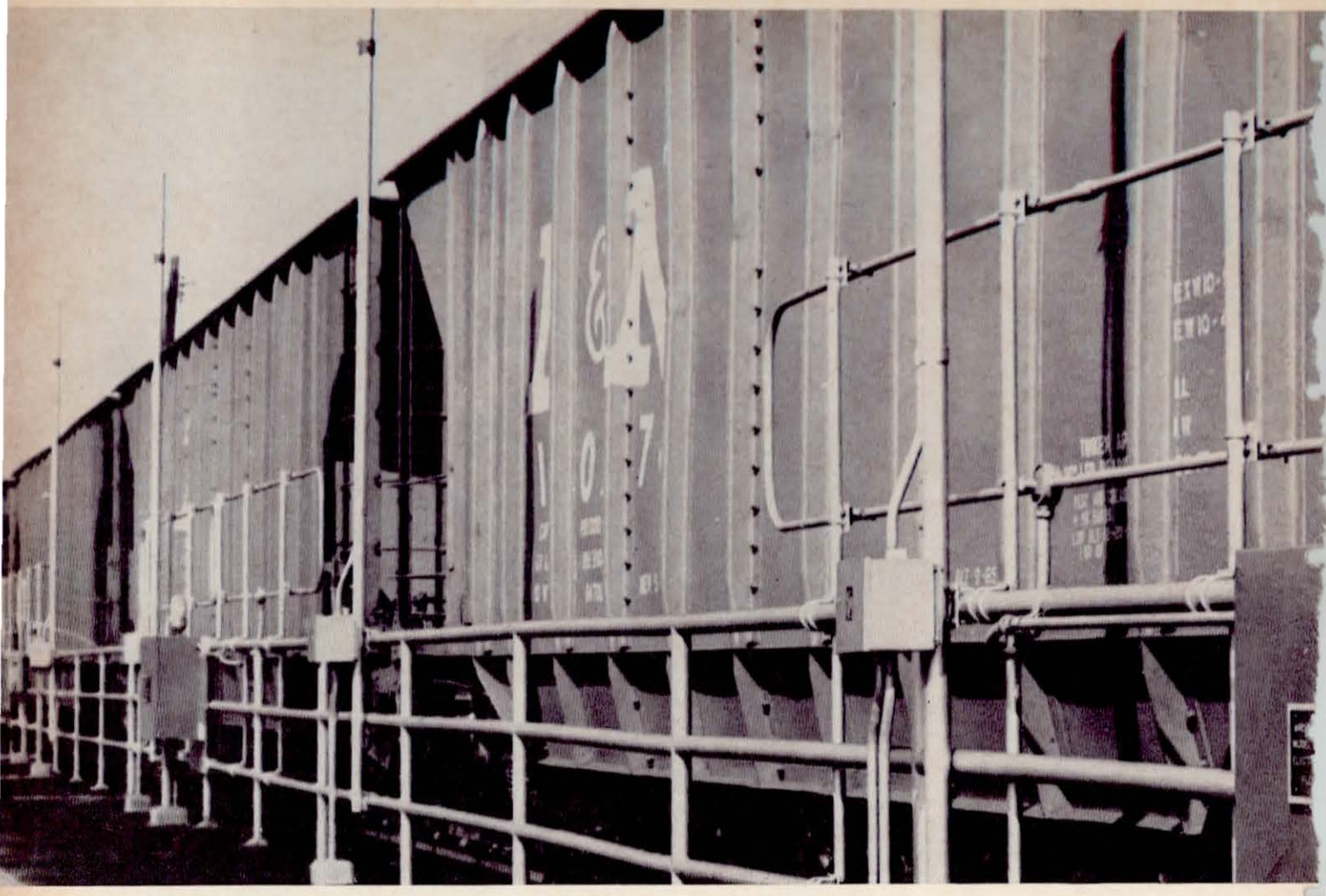
The unloading, from unit trains, is based on use of inductive coupling signals to activate automatic dumping equipment.

Modern technology is helping the Louisville & Nashville unload 7,200 tons of coal in 20 minutes. The fast unloading takes place at the Tennessee Valley Authority's Bull Run generating station near Oak Ridge, Tenn.

According to TVA, the Bull Run unloading costs only one cent per ton. The per-ton cost at other TVA generating stations is 4.5 cents.

• **Two unit trains.** L&N is operating two 72-car unit trains, made up of 100-ton hopper cars, in the service. The specially designed cars were built at the road's South Louisville, Ky., shops. A prototype car chalked up hundreds of miles of revenue service before the TVA operation was installed (RA, Nov. 4, 1963, p. 32).

Each car has eight longitudinal doors to a side. The doors are designed for automatic unloading when the car is in motion. Door design permits unloading to sides and center of rails without commodity buildup on the rails. Each group of doors is operated by a pneumatic cylinder having an 8-in.-diameter piston and a 24-in. stroke. Floor sheets at the car ends are covered with 20-gauge, type 410 stainless steel, which



aids in rapid discharge of the coal. The floor sheets incline upward at an angle of 38 degrees from the horizontal.

Basically, the fast dumping is accomplished by using inductive coupling signals to key automatic dumping equipment on the cars. The operation is a cooperative effort by the L&N, TVA and the Electropneumatic Corp. of Florence, Ala. Electropneumatic manufactured the EP-100 automatic hopper car door control system that is used.

When a 72-car unit train arrives for unloading, it pulls across an unloading hopper (318 feet long, 62 feet deep) and over an in-motion electronic scale to weigh the loaded cars. After the caboose clears the scale, the train is stopped. It then backs over the unloading hopper at about 2 mph, dumping coal into five unloading bins.

● **Inductive controls.** In the unloading hopper area are wayside antenna loops mounted parallel to and 8 feet from the center line of the track. Associated with the loops are several inductive transmitters and associated logic circuitry. The transmitters feed audio frequency signals to the antenna loops.

When a car equipped with the EP-100 hopper door controls is in the correct position for unloading (either moving or stationary), its receiving antenna is in position to pick up the transmitted audio frequency signal. To avoid turning the cars, receiving antennas are mounted on opposite sides at each end of the cars. These antennas are connected to a solid-state receiver in an equipment box mounted over the trucks at the "A" end of the car.

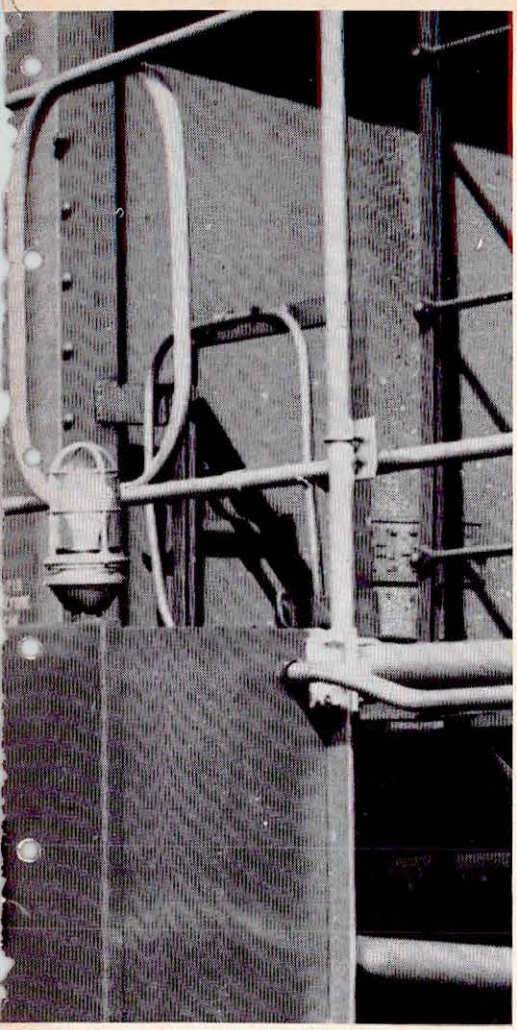
Upon receipt of the audio frequency signal, the receiver outputs a control to activate a pilot air valve. This valve directs air to activate the air cylinders that open the eight longitudinal doors per side on each car. So long as the car-carried antenna remains in the field of the wayside transmitting antenna, the air cylinders keep the hopper doors open. When the car moves out of this field, the pilot valve on the car is de-energized (it operates off a 12-volt car-carried battery), which actuates air controls for closing the hopper doors.

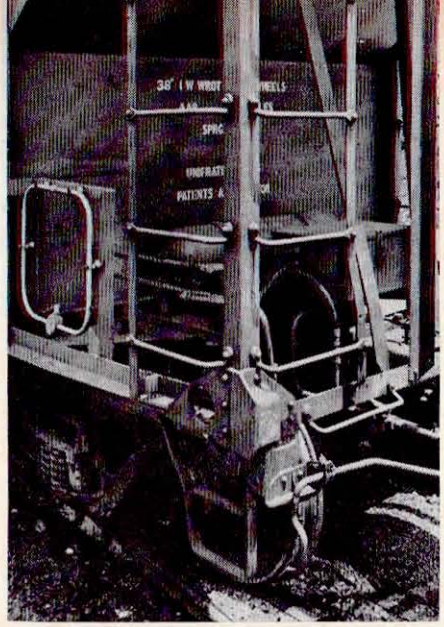
● **Separate air supply.** The air supply for hopper door operation is taken from a separate train line (on each car), which is connected to the locomotive's main reservoir equalizing line. This line is tapped and connected to a pressure switch in the EP-100 equipment box on each car.

The pressure switch senses only the pressure in the air dump supply line. When a train arrives at the unloading area, the angle cock on the last diesel unit is opened and the angle cock on the dump line on the end of the rear car is closed. This quickly raises the dumping reservoir pressure on each car sufficiently to close the pressure switch. The dumping reservoir on each car has enough volume to complete one unloading cycle.

At the completion of the unloading, the angle cock of the main reservoir line on the last diesel unit is closed. At the same time, the angle cock on the dump line of the rear car is opened. This exhausts the dumping line to atmosphere. All pressure switches on the cars are opened for the return movement of the empty train.

During normal train operation, the air dump system is charged from the regular train line, and flow is restricted by a 1/16-in. orifice in the 3/8-in. charge line. This connection permits the dump system to be pre-charged to train line pressure and yet maintain a de-energized control system due to lo-





RECEIVING LOOP on car receives inductive signal from the wayside "telling" the car-carried equipment to open the hopper doors to release the coal.

Key elements in the unloading operation

TRANSMITTING LOOP at wayside sends inductive signal to hopper car receiving loop. System provides for automatic in-motion dumping of all 72 unit-train cars.

cation of the pressure switch. Also, it provides an added safety feature by having air pressure on the rod end of the cylinders, which provides a secondary lock on the hopper doors. These doors are held in a closed position by an over-center mechanical lock and also by the weight of the coal. The door-opening cylinders must overcome the downward pressure of the coal.

● **One-man control.** Only one man is required to operate the scale and set up the dumping controls at the Bull Run plant. The operator is stationed in a control room overlooking the unloading bin and scale area. Upon train arrival, he is joined by the conductor who radios instructions to the engineman about train movement during the weighing and unloading cycle.

Automatic sequence unloading distributes the coal being unloaded from a moving train evenly throughout the length of the unloading hopper.

Along the length of the hopper are five unloading stations for automatic dumping. A sixth station is used for manual or stop-and-spot unloading.

After the train has passed over the scale and the loaded cars are weighed, the TVA operator activates the system for automatic dumping. He positions the station selector levers 1 through 5 to the automatic sequence position on his control console. After turning on the 12-volt d.c. control power, he checks to see that red status lights at each of the five automatic station symbols are lighted to indicate that wayside transmitters are energized. To supplement the radio system used by the conductor to advise the engineman, the TVA operator may display wayside signals to advise the train crew to begin moving the train over the unloading hopper at about 2 mph.

● **Repeating cycle.** The first car will unload when it reaches station 1, the second car will unload when it reaches station 2, and so on, until car 5 unloads when it reaches station 5. The following five cars (6 through 10) will unload simultaneously when they reach stations 5 through 1 respectively. The cycle will continue repeating until the entire train is unloaded.

During the unloading the operator observes the blue "station full" (nuclear flow detector) lights flash momentarily each time a car is unloaded. He also sees the red status lights go dark when a car is unloaded and later light up when an unloading station again becomes energized (ready to receive a car).

Ultrasonic detectors are used to locate the end of each car as it passes from station to station. A detector consists of a transmitter and receiver, each on opposite sides of the track.

Similarly mounted, but on opposite sides of the unloading hopper and below the track, are nuclear flow detectors. These consist of a nuclear source on one side and a detector unit on the other. The flow detectors indicate to the logic network in the control system that each car has unloaded at its proper station on the hopper. Also, they prevent further unloading at any station where the level of coal has exceeded a pre-determined point.

The coal being used in the Bull Run plant comes from several mines in the Hazard, Ky., area. The 600-mile round trip from Hazard, via Patio and Corbin down to Edgemoor, Tenn., takes less than 48 hours, including loading and unloading time.

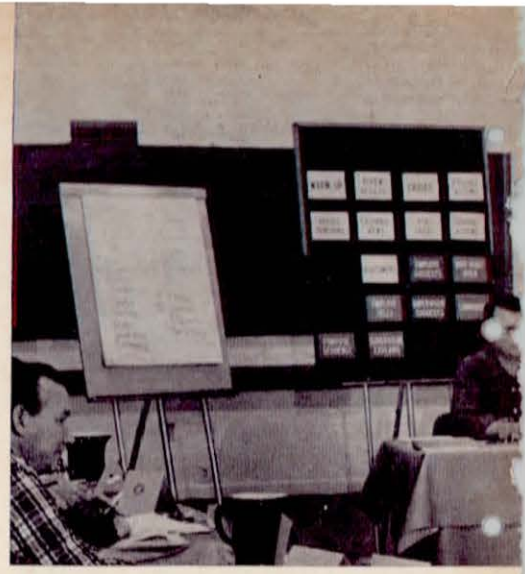
● **Advantages are many.** The 72-car train is at Bull Run less than one hour. Hence, the train crew which handles the loaded train to the plant departs with the empties. This saves L&N the daily expense of running another crew to pick up the empty cars. Also, the fast turnaround of equipment enables L&N to operate the movement with a minimum number of cars and locomotive units.

Compared with five other TVA steam plants, the Bull Run operation will provide a saving of 287 days annually per car in car-detention time. Cars are delayed an average of 24 hours from time of arrival at other TVA plants. Those plants have rotary car dumpers and conventional weigh scales.

Another saving comes from the fact that the train remains coupled during the unloading, including the caboose. This eliminates the delay and expense of assembling empties for the return movement to the mine.

The Bull Run plant has only 4 miles of trackage compared with 20 for the average of five other TVA steam plants. Capital cost of rail facilities at Bull Run per kilowatt of generating capacity will be 65 cents for the 3.8-million-kw plant when fully operative. At present, the plant generates 950,000 kw. This 65-cent-per-kw cost compares with the $1.74-per-kw average for five other TVA steam plants with a total capacity of 1.5 million kw.

Substantial freight rate reductions have accrued to TVA at Bull Run because the authority has provided the physical equipment to effect the extremely fast unloading of coal. ■



A FORMER BUSINESS CAR is now a rolling classroom used by a number of Central departments for instructing personnel. Courses taught range from how to deal with the public to technical subjects.

Training: It's

The New York Central has an ambitious training program that involves all levels of the road. The prime program is for junior management trainees—where tomorrow's officers are groomed.

Today he's probably wearing chino work clothes, safety brogans, and a hard hat. Tomorrow—or at least soon—he'll be trading in this wardrobe for a business suit, polished shoes, and, eventually, a door with his name on it.

Who is he? He's one of a new strain of embryo railroad officers being reared under a junior management training program now in full swing on the New York Central. Currently, the Central has 52 eager young college graduates learning the workings of the system from office assignments in New York's Lexington Avenue headquarters building to yard jobs in St. Louis.

But it's not just the newcomer with the college degree who's getting the attention of NYC management. Employees at all levels are being enrolled in training programs that range from courtesy courses on how to deal with the public, to nuts and bolts sessions for track foremen.

One of the great advantages of the training programs is that they have broadened the base from which selections can be made for professional and management positions as vacancies occur.

The educational revolution on the Central is all part of the road's stated

MIDDLE MANAGEMENT PERSONNEL have a chance to get together for a special two-day program at Tarrytown, N.Y. to hold seminars on planning, decision-making, motivation. Last year, 750 took the course.

a strong Central theme

aim to keep its people on top of the latest technological developments in railroading, and at the same time make them aware of the importance of their particular contribution to their railroad and the industry.

Prime architect and promoter of the NYC's broad training program is the road's education-minded president, Alfred E. Perlman.

"We have been—and will continue to be—constantly concerned with the development of our personnel, for we feel that this railroad is only as enterprising as its people," Perlman believes. Consequently, the order has gone down from the top that "the foremost duty of each administrator is to select and train the most promising people to be the future managers of the Central."

● **Youth will be served.** The image of the Central—and railroads generally—has changed in the last few years, NYC men believe. They see in their road meaningful signs of progress.

"The job opportunities are really here," says one recent graduate of the management training program. "It wasn't too long ago that the average age of the top officers was well up there. Now, top jobs are going to men in their 40s and 30s." In a few instances important supervisory assignments have gone to men in their late 20s.

The most formal setup on the Central for developing new railroad talent is the aforementioned junior management training program. Recruiting for the program is done by NYC personnel department people who scour the campuses of some 132 colleges and universities to find bright young men. This year the quota is 186 men.

Depending on their background and expressed interests, the new trainees (who in some cases have just completed military service) are assigned to a major department for training by James E. Martin, director of organization development. Most go to the operating department, others go to finance, marketing, freight sales or other departments. In some cases, specific departments will recruit directly for professional people, such as lawyers or engineers.

● **Learning about the railroad.** Keeping tabs on training in the operating department — which includes about 80% of the Central's 45,000 employees—is R. D. Timpany, assistant vice president, operating administration. At present he's busy sheperding some 30 trainees through a basic 18-month program that will see each man spending six months in the transportation department, six months in equipment and six months in maintenance of way. The course is a comprehensive one —when a trainee gets through it he knows what a railroad is all about. His schedule will include six weeks at the Collinwood locomotive shop, six weeks at the East Rochester Car Shop, 12 weeks at a point with a district mechanical superintendent, a week at EMD's La Grange plant, a day at New York Air Brake, six weeks at a major electronic yard, four weeks at a non-electronic yard, five weeks at Cleveland or Rochester to learn dispatching, a week in New York for motive power, two weeks on freight car utilization, and three weeks on computers. If he happens to be a trainee slated for the maintenance of way department, for example, he'll get assigned to a district engineer for six months of training out on the line.

The current program in the operating department was established in October, 1964, and the first man to complete it is now holding down a job as trainmaster. The second man through became a track supervisor, and the third trainee to finish the program (he holds a law degree) is the assistant to a master mechanic.

The new program for operating department trainees is considered to be a vast improvement over the previous training program. Under the old program, which covered a period of 36 months, the trainee was not afforded the exposure to the various departments of the railroad that today's trainee gets. Frequently the trainees became bored with lengthy assignments, or were sidetracked to a specific job.

"This is a special breed of cats," says Timpany. "They're anxious to learn, and believe me, they keep all of us on our toes."

After the trainee is hired and completes his orientation he is sent off into the field for his first assignment. During the 18 months he's given specific projects to tackle, which give his superiors an opportunity to evaluate his performance.

Oftentimes the trainee will undertake a project that turns out to be a valuable contribution to the Central's operations. One trainee, for example, devised a system for the classification and distribution of freight car door replacements that greatly simplified and expedited the operation for the railroad. Another saved NYC about $110,000 a year through an efficiency study that cut 10 unnecessary jobs.

"Our motivation," says Timpany, "is how do we improve what we are doing,

OPERATING DEPARTMENT course gives trainees a stint at Harmon Diesel Shop.

DATA PROCESSING is getting more attention in management training program.

NYC's trainees get to learn by doing

FIELD CONFERENCES give trainees an active role in daily operations.

instead of how did we do it yesterday. We don't use a text on the Central—it would be outdated this afternoon. So we keep our people informed of the latest developments in their field."

Timpany keeps in close contact with his trainees as they individually progress through the various stages of the training program. "I think it's essential to have maximum contact with our trainees . . . I tell a man if he's got a problem—about the job or a personal one—call me."

As part of the program each trainee submits a monthly report on his activities, and supervisors in the field also send in reports on the trainee's performance. A special week-long orientation seminar is part of the training program and is designed to cover areas of a railroad's operation that the trainees may be unfamiliar with. For a week, the trainees will meet in some city on the system where they'll meet many of the top officers and hear representatives from the Central's public relations, police, marketing, law and other departments. There are also field trips to nearby NYC facilities. President Perlman is a frequent speaker at these sessions.

What's the casualty rate for new trainees? Very low, say NYC men, and most often its for required military service. On the other hand, filling the NYC ranks with new training recruits is becoming less of a problem than it used to be. "Our training program enjoys an excellent reputation on campus," adds one officer. "The kids feel that the program has some meat to it. And this is important to their thinking. They're very concerned about the training and what it will lead to. About the last question they ask is: 'What is the pay?' "

• **Shortage of engineers.** While the biology majors and the business administration graduates may be signing up for NYC's training program, the engineering graduate is still not a common sight in the Central's personnel office—or most railroad offices, for that matter. To meet its growing need for engineering personnel, Central's equipment department is hiring young men with two-year associate degrees in engineering and is training other men to do work that will free the graduate engineers for more creative projects.

An average of 30 men are enrolled in a shop training program that involves an 80-hour course in basic engineering prepared by the Maynard Research Council. This is in addition to the regular shop apprentice and special apprentice work programs that are conducted.

By using the shop-trained personnel for many of the peripheral engineering duties that now take valuable time away from graduate engineers, the Central is getting more important work accomplished, and it hopes that its engineering jobs will become more desirable for job seekers. At present, NYC could use about 25 new engineers a year—if it could get them. And in the future the demands will be even greater. Consequently, the opportunity for advancement on the railroad is probably unmatched by any other industry.

• **Training the finance man.** The young man with the accounting or finance degree gets a six-month basic training course on the Central.

At the end of six months, he confers with his supervisor, having by that time selected the area of finance in which he wants to pursue advanced training. The program mapped out for him will lead to a middle management job.

C. D. Enzel, an assistant comptroller, said the casualty rate among financial trainees—extremely high years back—has been reduced substantially. He said Central has upped its requirements "and we are now getting very good people to go through our program." As with engineers, however, recruiters must still scramble to snare promising accountants from the short supply available.

There are no hard figures on what the Central is spending on its training programs. But it's estimated that on the

WATCHING **WASHINGTON** WITH WALTER TAFT

TAFT

THREE VACANCIES AT ICC—Commissioner Charles A. Webb's departure from the ICC will give President Johnson a third vacancy to fill there. The other two are those created by the resignation of former Commissioner Howard G. Freas, when his term expired at the end of last year, and by the expiration, also on Dec. 31, of Commissioner Abe McGregor Goff's term. Goff wants to be reappointed, so he continues to serve under that provision of the Interstate Commerce Act which says a Commissioner whose term has expired may stay on the job until his successor qualifies.

Webb's resignation has gone to the President with a March 31 effective date. On April 1, he will become president of the National Association of Motor Bus Owners, succeeding Everett Hutchinson who was also a member of the Commission. Hutchinson left NAMBO to accept Presidential appointment as Undersecretary of Transportation in the new Department of Transportation which is headed by Secretary Alan S. Boyd.

NO DEMOCRATS NEED APPLY—No Democrat can be named to any of the three Commission vacancies. That's because the Act provides that no more than a majority of the Commission's 11 members shall be from the same political party. Freas, Goff and Webb are Republicans, but the remaining Commissioners include six Democrats, that party's limit. This situation tends to favor Goff's bid for reappointment. Among other endorsements, he has those of some congressional leaders and the two senators from his home state in Idaho—Senators Frank Church, a Democrat, and Len B. Jordan, a Republican.

On the other hand, the three vacancies mean that the President can now build up his own selections to but one short of a Commission majority. Only two present members received their original appointments from President Johnson. They are Commissioners Virginia Mae Brown and Willard Deason. Appointees of previous presidents whom the President has reappointed are Commissioners Rupert L. Murphy, Laurence K. Walrath, John W. Bush and Webb.

NO PATTERN—There is no pattern indicating how President Johnson may handle appointments to the Commission. His first appointment was that of Commissioner Brown. He announced it in March 1964, terms of Commissioner Walrath and former Commissioner Clyde E. Herring had expired at the end of 1963, and both were still on the job seeking reappointment. It was three days after the Brown appointment had been announced before Walrath or Herring knew which of them would be replaced. The President then announced at a press conference that he would reappoint Walrath. Neither Walrath or Herring was advised in advance that the President was going to make that announcement.

The next vacancies came at the end of 1964, when terms of Commissioners Bush and Murphy expired. The President did not act at that time, but he did reappoint both of them early in 1965 for their present terms which expire Dec. 31, 1971. Terms expiring at the end of 1965 were those of Commissioners Deason and Webb. But there was no uncertainty then. When the President named Deason for a short term in 1965, he also named him for the full seven-year term beginning Jan. 1, 1966. And he sent Webb's reappointment to the Senate on Sept. 10, 1965, more than three months before the expiration of the term in which the appointee was then serving. Thus Webb is quitting when his term has nearly six more years to run.

McCARTHY TO NAMBO, TOO—With Webb at NAMBO will be Frank E. McCarthy, who has been the Commission's legislative counsel since 1965. He resigned to join the bus association last week as secretary-manager, which amounts to being assistant to the president. McCarthy is a son of the late Frank McCarthy, for many years the Pennsylvania's Washington vice president.

junior management training program alone the road could spend some $2 million this year if it got all 186 trainees it would like to hire. The calculation is based on an average starting rate of $600 per month, plus travel expenses and time costs for supervisory and teaching personnel.

- **Sales and marketing.** On a smaller scale, departments such as freight sales and marketing conduct training programs for their own specialized personnel. In the past, this type of department hired directly from outside. But now bright young men are being trained by NYC professionals.

Freight sales trainees also make the rounds of the system, spending weeks learning about district freight offices, major yard operations, freight rates, car utilization and yard procedure among other things. Yard procedure is taught at a special model yard office mockup in New York headquarters, and is used extensively to train employees.

- **How to win friends.** For the past couple of years the Central has been running employees through a kind of public relations course conducted by San Francisco consultants, Hob Ferguson and Associates. The program is designed to teach railroaders who deal with the public some of the finer points of being a good company representative.

On the first and second line supervisory level, the road is conducting two-day courses at district points. Subject matter is geared to supervisory responsibilities related to subordinates' work performance, and in areas related to loss and damage, accident prevention and other traditional trouble areas.

Among the technical programs the road has engaged in is a week-long series of courses for track foremen. The 12-hour daily class sessions bring Central line people up to date on new track machines and engineering techniques, their area of responsibility, and other aspects of railroading.

- **House of the Hudson.** The road has an unusual training program for middle-management people that meets in a former private country estate in Tarrytown, N.Y. Originally developed by F. L. Kattau, now assistant to the president-administration, it has been further developed by Director of Organization Development James Martin.

The program, conducted from May to December each year, offers men from throughout the system a two-day session on improving coaching practices, planning and follow-through, and decision making and motivation.

Martin said the program has been enthusiastically received, (750 took the course last year) and plans are being made to expand the program. ■

FLOUR HAULS for Pillsbury utilize full cube and weight carrying features of 4,650-cubic-foot carbody; production car follows

Dynabulk car unloads as its lining is

New pressurizing concept is utilized for handling a variety of powdered, granular commodities.

A new principle for handling and transporting bulk materials has been developed by the Dynabulk Corp., Bellevue, Wash.

The patented Dynabulk principle has been incorporated in two cars built by the Gunderson Bros. Engineering Corp. The cars can transport almost all types of powdered products, such as starch, flours, resin powders, wood flour, carbon blacks and chemical powders. Each car is a steel cylinder on wheels. The ends of the cylinder are lined by large, flexible, urethane-rubber containers called Dynaframs. Each Dynafram is a huge bag with circular openings sealed around the inner circumference of the cylinder.

• **Fast unloading.** The openings of the two containers face each other. They are separated by the center third of the car, which is lined with a stationary Insuliner, also made of urethane rubber. To facilitate unloading, Dynaerators (quickly removable, sanitary, air-fluidizing panels), have been placed along the bottom of the center section. Four hoses must be connected to the car for its unloading.

Each of the two Dynaframs, retracted at both ends, and the Insuliner are held tightly against the tank shell by air suction while the car is being loaded. When unloading, the Dynaframs are operated, one at a time, with about 1½ to 2 psi differential air pressure, supplied from a dockside blower. The containers are actually turned inside out to roll all the lading toward and into the center of the car and a single-cone discharge outlet. This eliminates bridging and clears the car floor.

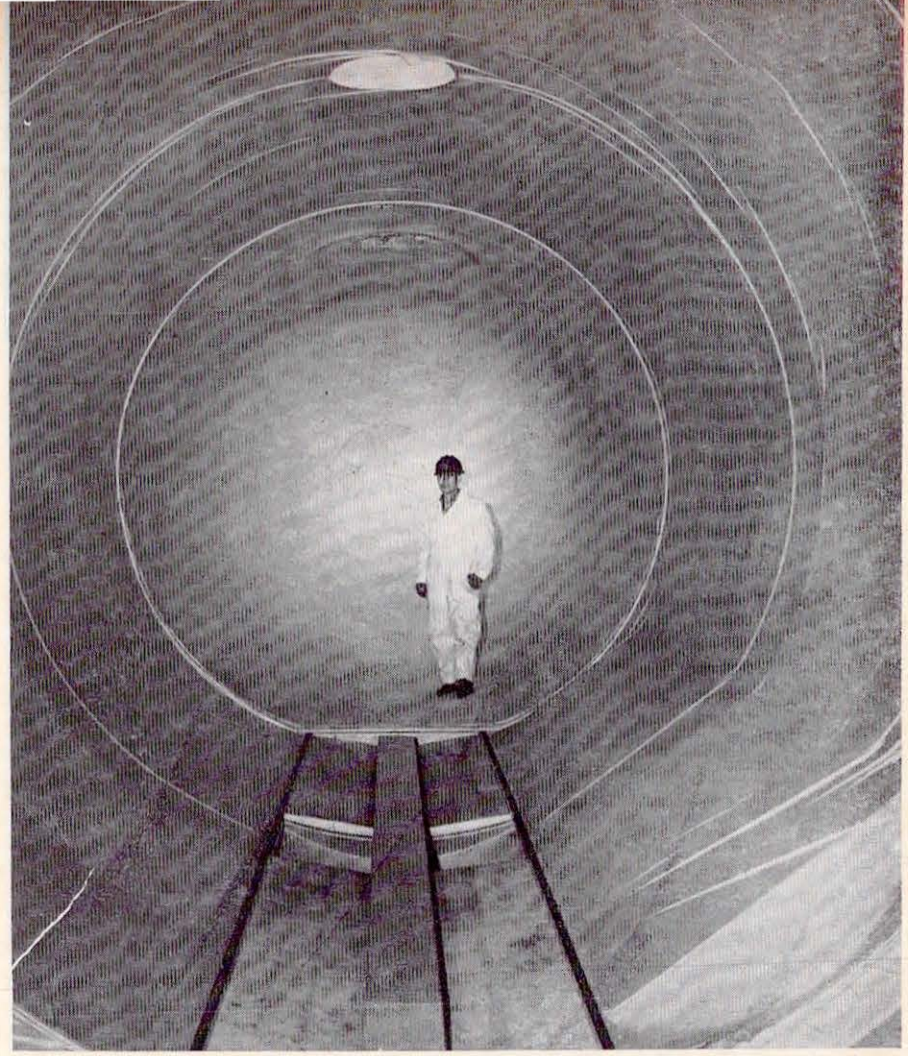
The Dynaerators aerate or fluidize powdered materials to assist them to flow freely for discharge. A bottom center T-rail prevents each Dynafram from closing off either the Dynaerator or the discharge outlet.

When unloading has been completed, the Dynaframs are brought together, eliminating all dead air space in the lading zone and insuring that no condensation can occur during the return empty trip. The setup also facilitates introduction of inert gas for preventing or eliminating insect infestation.

• **High revenue content.** Practically all space in the tank can be filled with revenue freight. When the car is full of air-laden material, entrained air is evacuated from the lading zone by compressing the Dynaframs tightly around the load, reducing its cube. The Dynaframs are then drawn back by suction to their former positions and the empty space is filled.

The car is designed for use with any existing type of take-away system. It requires only a low-cost dockside adap-

5-month test with prototype unit.



FLEXIBLE LINING covers interior of carbody; aerators are at the bottom.

inflated

tation package, furnished by Dynabulk. Thus, there is no interference with the use of other types of air-fluidized cars.

Other advantages claimed for the Dynabulk car include:

—A single outlet, 28 inches above the track;

—One-time, simple hose hookup for complete unloading;

—No car re-spotting;

—No need of car roof dusthoods for unloading;

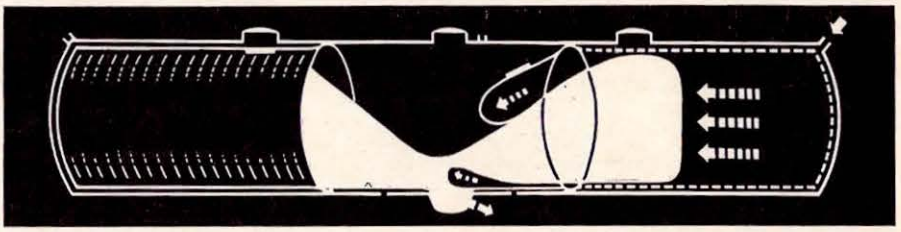
—Long-distance, high-speed pressure differential conveying capabilities;

—Snap-out, sanitary, fluidizing plenums;

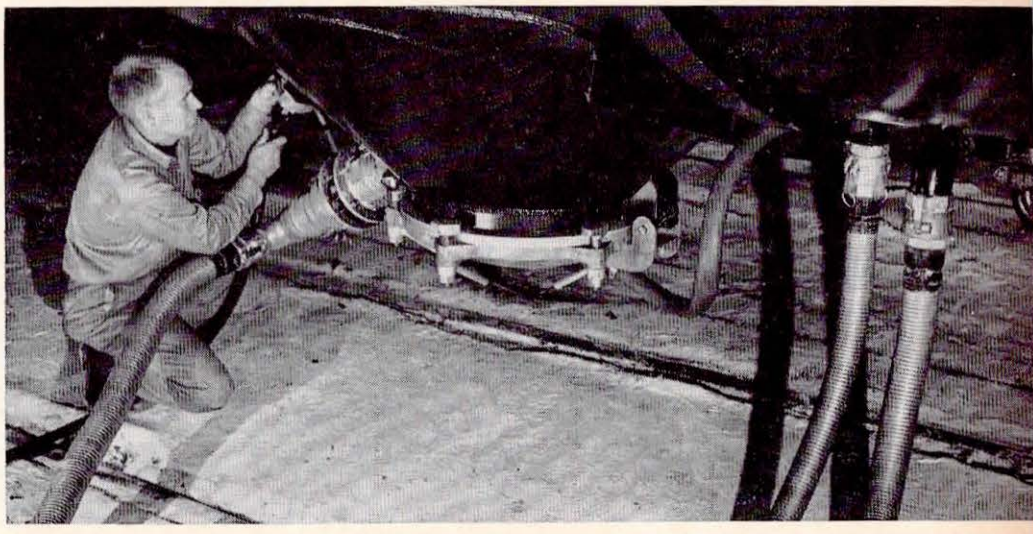
—No product spillage at the unloading point; and

—Simple, clean, uncluttered car interior.

Improvements and refinements in design have been incorporated in one production model to be used by the Pillsbury Company in regular flour service between Minneapolis, Minn., and Springfield, Ill. ■



POWDERED LADING is shoved to bottom outlet as Dynaframs are pressurized.



PNEUMATIC LINES serve to fluidize lading and inflate linings in the course of unloading. One hose carries away the material as it reaches outlet.

PARKING AREA at Charlotte, N.C., can handle as many as 700 new automobiles.

SAL's new auto traffic continues to boom

Modern ramps — which permit fast and efficient unloading of automobiles—are basic factor.

Seaboard Air Line continues to score victories in the battle to recapture new-automobile traffic from trucks. One element in the success story is the road's many ramps providing fast, efficient unloading of automobiles.

• **Placed strategically.** The Seaboard has supplied ramps at strategic locations, throughout the system: Columbia, S. C.; Jacksonville, Fla.; Tampa; Miami; Norfolk, Va., and Atlanta, Ga. The last is a joint operation with the Louisville & Nashville.

With the advent of Charlotte, N.C., as an important distribution point for the Ford Motor Co., the Seaboard put the most modern ramp on its system into service there.

The ramp is used on shipments coming from about 15 Ford plants throughout the country. It was the provision of complete service by the Seaboard and its northern connections that induced the automobile company to ship by rail, plus, of course, the fast service made possible through handling the movement on fast trains.

The traffic has become important to the northern connections. The connecting lines have geared in fast schedules to match those on the Seaboard so that the total movement is handled expeditiously from origin to destination. This is true even when a circuitous route is required because of the Washington tunnel, which will not permit passage of tri-level cars. The tri-level cars are run via Hagerstown, Md., and the Norfolk & Western to Peterburg, Va., for delivery to the Seaboard there. But there is little or no terminal delay and fast connections are also made on this route.

Construction of the Charlotte ramp was based on the experience acquired since 1960 at the other six ramps used by the Seaboard.

The site consists of 17 acres, which required 16,300 cu. yd. of grading, 8 acres of asphalt paving and 4,200 ft of chain-link fencing, in addition to other site preparation.

• **Cost: $500,000.** The site, in SAL's industrial park in West Charlotte, is readily accessible to major interstate and state highways. The total project, including the land and the pro rata share of the costs previously attributable to the development of the industrial park, will cost Seaboard $500,000. This facility and the entire park surrounding it is served by the utilities of the city of Charlotte. All the improved portion of the site is illuminated for night work.

Track material used included 3,700 linear feet of 100-lb welded rail on concrete ties and four No. 8 100-lb turnouts. This supplied space for spotting 24 automobile rack cars on four unloading tracks. An electrically-controlled Buck ramp mounted on rails is at the end of the tracks. The Buck ramp is adjustable vertically for unloading from each level on the tri-level cars, which will be used extensively here, or from two-level cars. This Buck ramp also has horizontal movement so that it may be used for any of the four unloading tracks. An additional gasoline-powered, mobile Buck ramp is supplied for unloading cars that arrive turned in the wrong direction.

• **Large parking area.** A motorized car-straddle A-frame is supplied for unloading trucks and tractors. There are seven portable ramps of steel construction for loading from storage in the huge parking lot to the transport highway carrier. The paved parking area has ample space for 638 vehicles for optimum parking and loading operations, but the lot can handle 700 automobiles.

The one-story office building is 30 ft x 53 ft in over-all dimensions. It has brick and block walls, with a flat built-up roof on a reinforced concrete deck on a steel bar joist. The floor is concrete slab on grade, covered with 1/8-in. asbestos tile. Interior walls and partitions are of painted block. The ceilings are of mechanically suspended acoustical tile. The building has an all-season air conditioning and heating system. Lighting consists of surface-mounted, double-tube fluorescent fixtures. The office building is used for general and private office areas. Space is also provided for the drivers' entry, with counter facilities. Lockers, toilet and shower facilities are also supplied for the drivers.

A second building, 75 ft by 90 ft, consists of a garage and an attached wash apron. It has a 20-ft-high rigid frame, built of brick on block walls 10 ft high, with metal siding to a gable roof. The floor consists of concrete slab on grade. This building has four 13 ft by 15 ft rolling steel doors on one side, and a 10 ft by 10 ft door on the opposite side. In addition to the fence surrounding the entire area, the garage has a 26 ft by 8 ft high wire fence partition for special locked storage. The building is heated. It is also used by the Motor Transport Co. for tractor servicing and repairs.

The wash apron is 75 ft by 20 ft. It is supplied with hot and cold water and a drainage system. Contractors for the site preparation and the buildings were Blythe Brothers Co., for grading and paving; Myers & Chapman, Inc., for structures; Georgia-Carolina Railroad Contractors, track; and the Harrison-Wright Co. for the electrical work. ■

DOT's Alan Boyd says his aim is for change amidst order

His forecast for railroads: They are irreplaceable as bulk freight carriers and can stay in short-haul passenger business.

Custom has made it something like protocol for a new member of a President's Cabinet to deliver one of his early addresses in that role at a luncheon meeting of Washington's National Press Club. Secretary of Transportation Alan S. Boyd did that Feb. 13, a couple of days before the end of his first month in office. Boyd was sworn in at the White House on Jan. 16.

At the Press Club, he said DOT's general objective will be to practice the art of progress by undertaking to preserve order amidst change. Unless it goes in for change, DOT will be wasting the taxpayers' money, Boyd said, adding: "If there were no need for change, there would be no need for DOT."

● **Bombs again.** During the question period which followed his address, Boyd returned to the same general theme. He was reminded of a remark (intended to be facetious) which he made sometime ago about "throwing the bombs" a year hence when DOT has got itself organized. Recalling how he had tried before "to get my foot out of my mouth" as to that remark (RA, Nov. 21, 1966, p. 34), Boyd explained again that he was making the point that human nature is committed to the status quo—"but, if DOT is to be effective, it must recommend change, and that's what I meant. I'm sorry I used such colorful language."

Meanwhile, Boyd emphasized that when he talks about DOT's job of being concerned about the nation's transportation problems, he is not talking about going in for intellectual exercise.

● **Seeks wise investment.** DOT will be called upon to deal primarily with government investment in transportation facilities, Boyd also said. As he sees it, public investment has provided most of the plant over which private enterprise offers transportation services in this country. As to railroad plant, the Secretary has in mind the federal land grants, and the assistance also given in the early days of railroading by state and local governments. Here, Boyd hastened to explain that railroads "have paid that back." And he added that highway carriers are making substantial contributions to the cost of roads.

In its undertaking to see that federal outlays for transport facilities are wise investments, DOT will rely on the so-called cost-benefit formula. That has been the traditional basis for appraising proposed waterway projects. Generally, it defines benefits as the differences between freight rates charged by other modes of transportation and what would be paid to water carriers after completion of a proposed waterway.

● **Watering didn't drown criteria.** Actually, Boyd has relatively little authority in this area. The original version of the bill which became the DOT Act would have authorized him to set standards and criteria for federal spending on transport. That proposal was emasculated before the Act cleared Congress. The final version excludes spending for waterways from the scope of the Secretary's criteria authority, and it requires Congressional clearance before he can promulgate criteria for other transport spending.

Waterway 'Adviser'

As to waterway spending, however, he may be able to influence recommendations of the Water Resources Council. He will be a member of the Council when it considers matters pertaining to navigation. He may also become an influential adviser to President Johnson as to recommended appropriations for all transport spending. The Administration's House leader on the DOT Act was Representative Chet Holifield (D.-Calif.). In accepting the amendments which emasculated the original version's criteria provisions, Holifield emphasized that nothing in the final version "will or should limit the power of the President to consult any of his department or agency heads and, upon their advice or otherwise, set up standards to evaluate projects."

Boyd's answer to a question indicated his feeling that the waterway interests are already getting away with quite a bit. The question asked if he would make it easier to get waterway improvements. His answer was: "The waterway people seem to be the only ones able to get what they want. The cost-benefit approach is reasonable. I know of no more liberal alternative unless we say that anyone advocating a waterway project gets it."

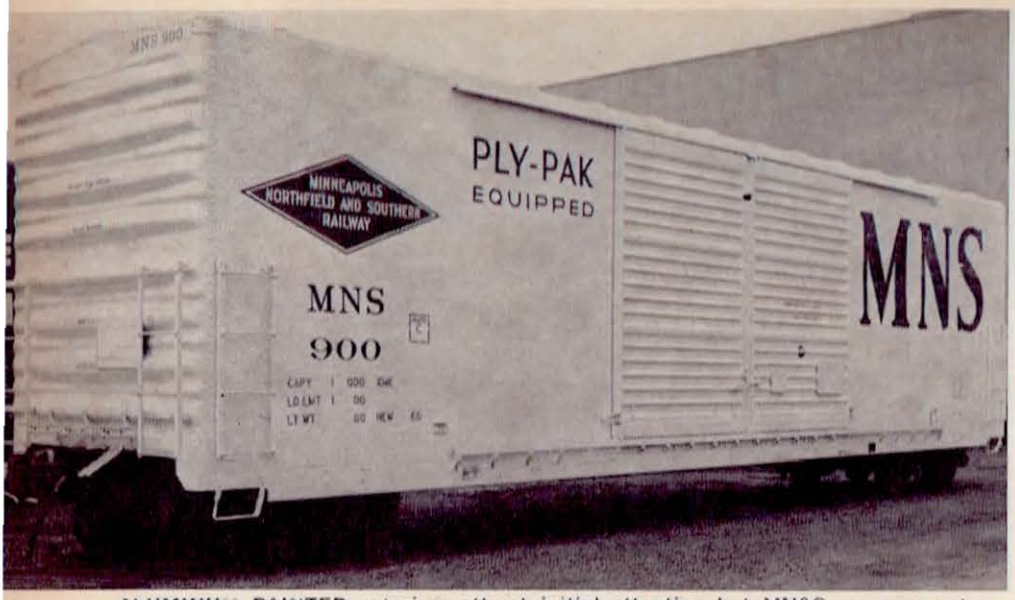
● **More rail resurgence seen.** Another question asked whether railroads would be "scrapped like the street cars." Boyd noted the "considerable difference" between the two, emphasizing the railroad's principal role as a carrier of bulk commodities. He proceeded to predict that the industry will continue its "resurgence of the past four or five years," because there is no alternative to much of the railroad freight service.

As to railroad passenger service, Boyd thinks its future is in short-haul inter-city and commuter operations. In the former connection, he has runs of "200 miles or so" in mind. He sees "no great future" for long-haul railroad passenger service. In response to other questions, he predicted that air service by helicopter will also be operating extensively in the 200-mile-or-so area.

References to Japan's New Tokaido line prefaced questions about the government-sponsored plans to experiment with high-speed rail service in the Northeast Corridor between Washington and Boston. Boyd explained that the Northeast Corridor and Tokaido projects are "not the same." Among other differences, he noted that the Corridor project now contemplates Washington-New York and New York-Boston services separately—not through Washington-Boston service. Also, it does not now contemplate speeds as high as Tokaido's. Through Washington-Boston service might come later if the merged Pennsylvania-New York Central takes over the New Haven, Boyd said.

As to commuter service, Boyd identified "urban transportation" as the transport problem which should now have top priority. DOT's role in this area is limited at present to participation in a joint study with the Department of Housing and Urban Development. HUD still has the federal government's transit functions. Congress ordered the study to determine the most logical place for those functions.

● **DOT not yet in business.** DOT is not yet formally in business. The act creating it provides for its activation 90 days after the Secretary takes office—"or on such prior date as the President shall prescribe and publish in the Federal Register." President Johnson will take advantage of the latter provision to fix March 1 as activation date. ■



ALUMINUM PAINTED exteriors attract initial attention but MN&S management expects customers will really remember the specialized interior fittings.

STANCHIONS are arranged so load pattern produces transverse balance in car.

Ply-Pak eases loading problem

Specialized box cars for plywood and hardboard feature patented vertical stanchions which secure their packaged loads; customers report satisfaction with the new MN&S equipment.

A small railroad has just made a big investment in new box cars which are attracting considerable attention from Northwestern plywood shippers. The Minneapolis, Northfield & Southern, a 77-mile Minnesota bridge and terminal road, is now operating ten Miller Ply-Pak cars, the first lot of such specialized plywood transporters ever built.

Externally the new MN&S units look quite conventional. The interior fittings, however, patented by W. D. Miller, a Northern Pacific traffic officer, set the new cars apart. Prior to the construction of the MN&S cars at the Gunderson carbuilding plant in Portland, Ore., NP had fitted one of its own box cars with the Miller equipment.

● **Dunnage reduced.** The principal problem confronting shippers of bundled plywood and hardboard has been excessive dunnage costs, when conventional box cars are used. Miller aimed to reduce this cost by bracing the stacks of 4- by 8-foot packages in cars at least 9 feet wide with removable aluminum posts (or stanchions) installed vertically. These hollow tubular bars also function as ventilating ducts when it is desirable to vary the moisture content of the lading during shipment.

Just how well the new arrangement has functioned is indicated by E. J. Smith, general traffic manager for Edward Hines Lumber Co., after receiving the first Ply-Pak car at Chicago. "We were very pleased with the condition of the lading and protection afforded by the stanchions," reports Smith. "We believe further tests will prove the 'stanchion' car will do the same job as a cushion-underframe car with sidewall fillers and two adjustable bulkheads."

● **A time saver.** Southwest Sash & Door of Kansas City was equally enthusiastic after unloading the 40-foot experimental NP car. A fork-lift operator, unassisted, removed 30 packages of 3/4-inch plywood—1,200 panels—in less than two hours. Time savings resulted, said Southwest Sash, from the absence of nailed blocking and the fact that there had been no shifting, which often makes it necessary for stacks to be "squared" before they can be handled by a lift truck.

Cuts loading time

Loading time is also reduced. With the elimination of steel strapping and special bracing required by loading regulations, the time for filling a car with plywood is cut from three hours to less than one. Plywood shippers discovered this as Ply-Pak cars moved directly from the Gunderson production line to their plants for loading. Two of the very first MN&S cars were loaded by Jones Veneer & Plywood and United States Plywood at Eugene, Ore., in substantially less time than is required for conventional equipment.

● **Another benefactor.** Railroads benefit from the reduction in traditionally high claims against plywood shipments. The Ply-Pak installation cuts the amount of dunnage from 1,000 pounds, or more, to about 350 pounds, including the spacers between bundles for lift-truck forks.

Investment in $18,000 box cars for a maximum 45-mile line haul represents more than an interest in revenue divisions on the part of MN&S management. The road—connecting with Great Northern, Northern Pacific, Milwaukee, and Soo in the Minneapolis area—extends southward to junctions with Chicago Great Western and Rock Island.

The Ply-Pak cars are seen as dramatic evidence of MN&S involvement in the perennial car problem confronting the Northwest's lumber-producing areas. According to R. E. Birkholz, executive general traffic manager of the MN&S, customers' response to the new equipment has been gratifying.

● **It's what's inside . . .** Although their colorful exteriors are attention getters, the features which really count are more than skin deep. The 50½-foot interior is fitted with bulkheads

which serve to reduce the usable interior length to 48½ feet. No spacers or bracing are required in the doorway area to produce a tight load.

The bulkheads, consisting of 6-inch I beams mounted against heavy structural channels, top and bottom, strengthen the car ends. They also present a square surface against which to load the rectangular packages. Between the vertical beams of the bulkhead is a space for the storage of the aluminum posts when the car is moving empty or is being used for other traffic.

Each post, a 4- by 4-inch extruded tube, is secured in a cast steel floor socket at its bottom and in a steel bracket at its top when in use. Each of the top brackets is welded to the side plate, which is the longitudinal structural member at the junction of the car side and roof.

● **Loading pattern.** The loading pattern for which the sockets and brackets are arranged places four stacks crosswise in each end of the car. Four more of the 4- by 8-foot stacks are placed lengthwise in the doorway area. Each crosswise stack in the car's end is braced against the opposite sidewall by a single post. Through the doorway area, there are four posts installed along each side of the stacks which are centered along the car's longitudinal centerline.

Between the wood-lined walls, the car has an inside width of 9 feet 4 inches. Inside height is 11 feet, although the load limit is normally achieved with three-high loading of the 2½-foot-thick bundles, which leaves considerable overhead clearance for lift-truck maneuvering.

● **Wooden flooring.** Each MN&S car has a plywood floor protected by a tough, flexible, non-skid coating which has been used on the decks of aircraft carriers. The floor design was produced by the American Plywood Association.

The 3/4-inch exterior-grade plywood subfloor is attached with screws to the car's underbody members. The 1/2-inch plywood floor is then stapled in place and covered with moisture-curing polyurethane resin containing ground-glass particles to form the non-skid surface. Along with resistance to load shifting, the surface is intended to resist heavy lift truck loads and excessive vibration.

Double doors with an opening of 16 feet simplify lift-truck loading and unloading. The 70-ton cars were all delivered by Gunderson during December 1966. Since then they have been moving regularly out of the Northwest with capacity loads of building materials. This usually means 36 packages of plywood, hardboard or particle board. ■

LUTHER MILLER

AS THE EDITOR SEES IT...

HOW MANY DEATHS, INDEED?—ICC Accident Report No. 4096 is, at the outset, a more or less routine document: "On August 27, 1966, a motortruck struck a Southern Pacific Company freight train moving over a rail-highway grade crossing at Clotho, Calif. The driver and one truck passenger were killed. Four train-service employees were injured. The accident was caused by the truck driver's failure to control the speed of his motor vehicle as required by state law and to stop short of a train moving over the rail-highway grade crossing."

But on page three of the report comes the shocker:

"Records of the Public Utilities Commission of California indicate that, including this case, seven persons have been killed and six have been injured in five accidents at the Clotho crossing in the past four years."

A few weeks ago, in a special report on grade-crossing accidents, we posed the melancholy question, "How many deaths will it take?"

The answer—from Clotho, Calif.—is inconclusive, and troubling.

Suppose that seven persons had been murdered on a single Clotho street corner in the last four years. In all probability, that corner would now be staked out by the cops, by demand of an angry and fearful citizenry.

Isn't it time we staked out our grade crossings, especially those with such bloody histories?

In many cases, laws designed to reduce the slaughter at grade crossings already exist; the problem is one of enforcement.

But as we inquired a few issues ago: Who ever heard of a cop giving a traffic summons for a grade-crossing violation?

ONE ENGINEER'S ANSWER—James L. Hens is a locomotive engineer for the New York Central, on the Niagara Falls-Syracuse run. On each trip, he recently told a local reporter, about a dozen motorists race his train to crossings.

Mr. Hens is in a better position than most engineers to do something about it. As legislative chairman for the Brotherhood of Locomotive Engineers in New York State, he has been able to have introduced in the New York Senate and Assembly, an amended act that would sharpen the teeth of that state's existing law applying to grade crossings.

The amendment proposed by Mr. Hens closely parallels this magazine's own recommendation. It would empower the state traffic commission to "designate routes to avoid grade crossings of railroad by motor vehicles transporting inflammable liquids and toxic or explosive materials, and shall require such vehicles to travel on such designated routes."

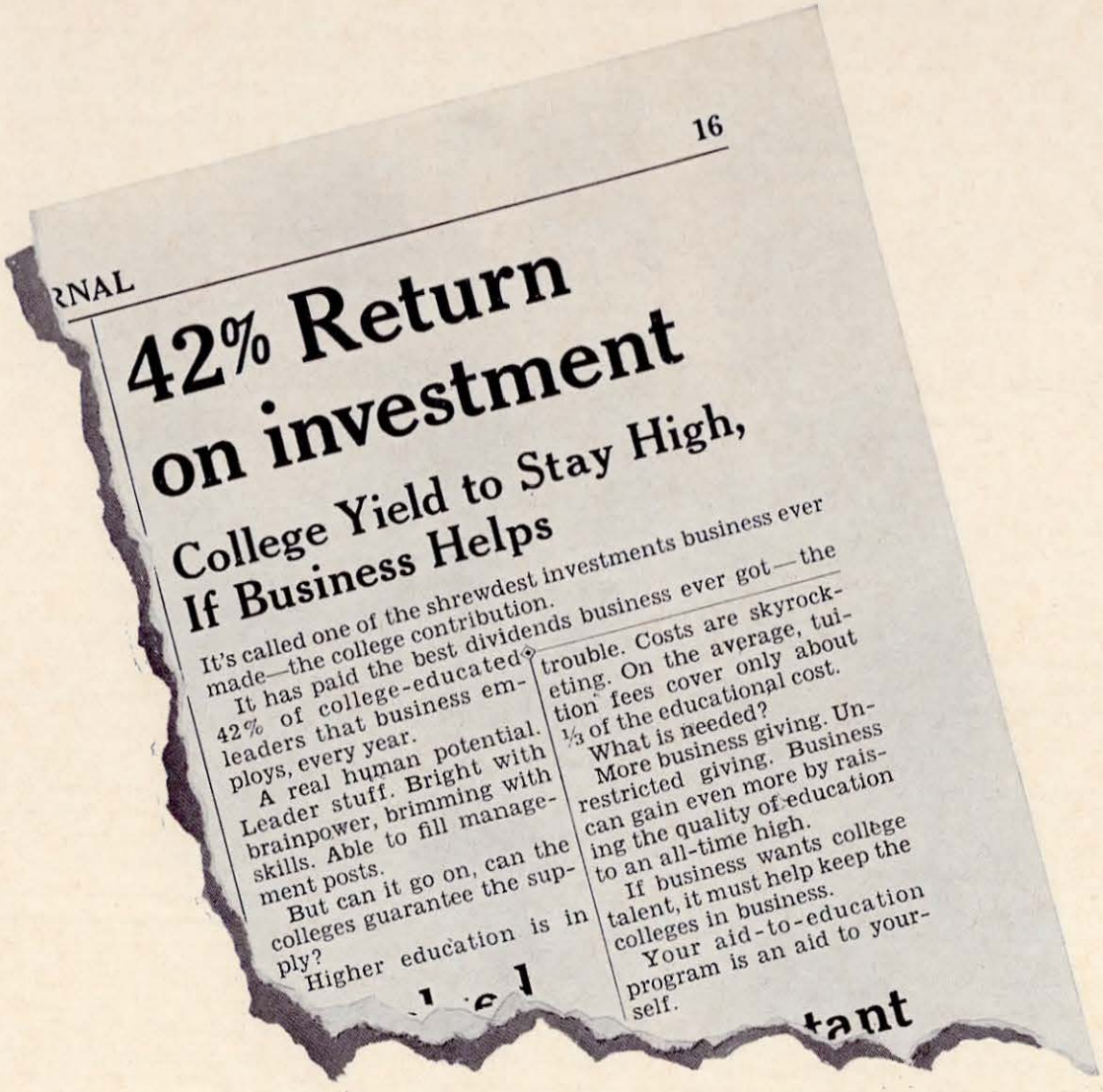
We congratulate Mr. Hens on his enterprise; and we will do all in our power to see that New York legislators are alerted to the importance of the amendment he proposes.

But the fact remains: Laws that aren't enforced are as bad as no laws at all. Only when local enforcement agencies recognize that death by accident at a grade crossing is just as permanent as death by premeditation on a street corner, will we begin to see a solution of the problem.

STANDARD TRAFFIC LIGHTS?—Charles A. Schrade of Mt. Solon, Va., has a rather more drastic proposal: "Install standard traffic lights at crossings, facing the highway. Standard traffic lights are cheaper; and they are 99% instinctively obeyed by drivers. Railroad-type lights are 'unofficial' in the eyes of car drivers and thus are often ignored.

"The same driver who will ignore flashing lights and wig-wag signals to cut across in front of a fast-moving train, will drive two blocks and patiently wait for a standard traffic light with *nothing* coming the other way!"

Blue chip.



16

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The outdoor life. Any indoor man will tell you how great it is. But only an outdoor man can tell you what it does to human skin.

Constant sun dries skin out. Leathers it. Burns it over and over again. And that can be dangerous.

If you are out in the sun a lot (or even if you're not), check into any sore that does not heal. Promptly. It could be a warning signal of cancer. And cancer is easier to cure when it's detected early.

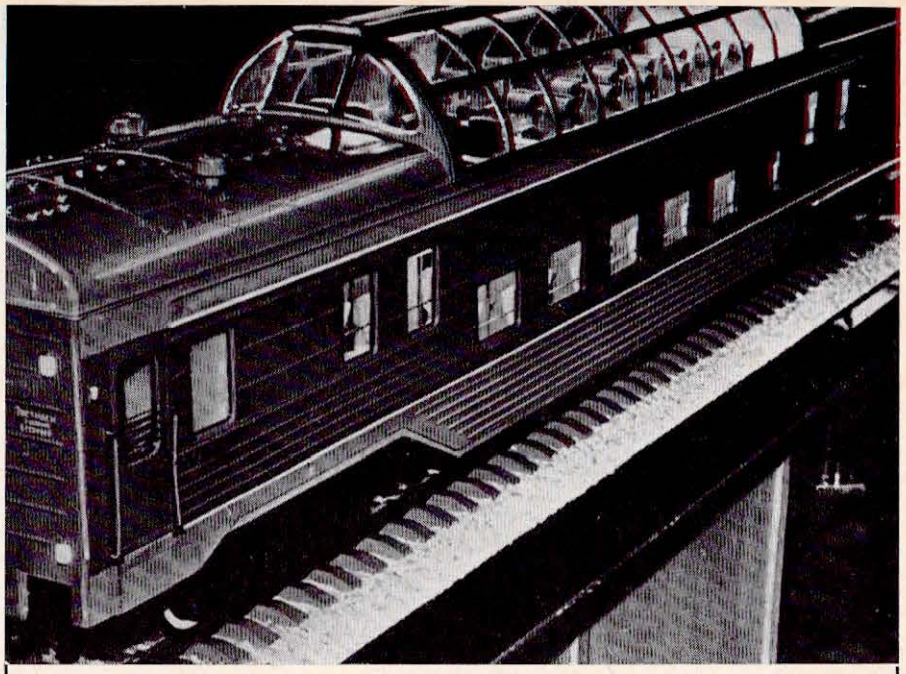
Lorne Greene knows the seven warning signals of cancer. So should you:

1. Unusual bleeding or discharge. 2. A lump or thickening in the breast or elsewhere. 3. A sore that does not heal. 4. Change in bowel or bladder habits. 5. Hoarseness or cough. 6. Indigestion or difficulty in swallowing. 7. Change in a wart or mole.

If a signal lasts longer than two weeks, see your doctor without delay.

It makes sense to know the seven warning signals of cancer.

It makes sense to give to the American Cancer Society.®



Russia invents a "cupola carriage"

Railway tourism is booming in the Soviet Union—and to make vacation train travel even more attractive, the USSR has come up with its own version of the dome car *(photo)*.

The new car, reports Novosti, the Soviet press agency, was developed at the Yegorov Railway Carriage Building Plant in Leningrad. It is described as "an eight wheel, two-story carriage with a transparent cupola."

The lower level has compartments for 28 passengers, one less than the standard Soviet railway car of this class. The upper level has 28 "convenient and soft seats of airplane type."

Two air-conditioning units "will insure the most favorable microclimate in any part of the country." To be on the safe side, an experimental car has already been tested under the warm conditions of Central Asia; it is now ready for tests in Siberia. The "cupola carriage" will be assigned to package vacation tours. Such tours, according to Klavdia Shapakina, chief of the railway tourism section of the Ministry of Railways, have become so popular that there is not sufficient equipment to meet the demand.

A typical 20-day tour (as described by Novosti) leaves Moscow and travels to the Black Sea and the Caspian Coast of the Caucasus, a total of about 4,000 miles. The cost —including sleeping compartments, three meals a day in restaurant cars, and side excursions—is 150 rubles, or about $165.

"Railway tourism [reports Novosti] began developing in the Soviet Union in 1960, and in the past six years the number of people spending their leaves in railway trips about the country has increased by more than 100 times. . . .

"Apparently railway tourism would have developed at even greater rates if the Ministry of Railways would have provided more carriages at the disposal of the tourist firms in the summer period.

"The 36 functioning long-distance tourist routes, with the length of several thousand kilometres each (there is a total of 450 trains running on them annually) are insufficient now.

"Three new long-distance tourist routes and another 50 trains which will start running on the country's railway tourist routes in 1967, will hardly be able to solve the problem radically. Apparently, the basic way of tackling the problem is in setting up a special park of tourist carriages."

And that's what led to the "cupola carriage."

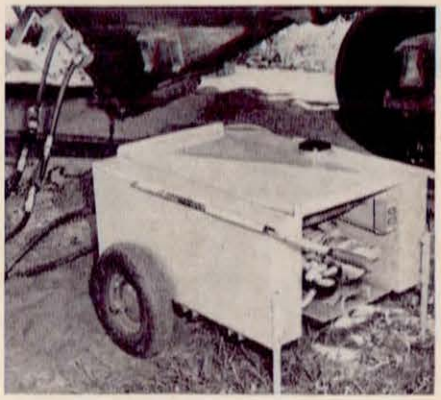
NEW PRODUCTS REPORT

Safety Flags (RA-1)

Errors in night-time movement of cars at Lukens Steel plant are said to have been minimized through the use of blue phosphorescent "hold-car" flags made of nylon, coated by Reeves Bros. with vinyl pigmented with phosphorescent chemicals. Material is said to radiate light for 10 to 12 hr after being activated for short periods by natural or artificial light. Metal collars on flagstaffs keep flags from falling through coupling holes. *Werlin Safety Products.*

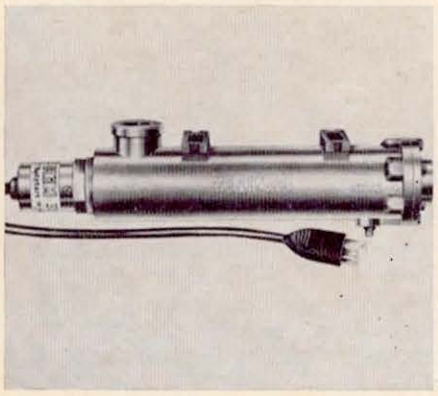
Preheater Thermostat (RA-2)

Explosion-proof Kim-Stat thermostat control, for use with Hotstart water jacket preheater in hazardous locations such as equipment transporting or storage near combustible material, automatically regulates preheaters at preset engine temperature, controlled within ±10 deg. Controllable temperatures are from 40 to 180 deg F. Control is installed at preheater intake or on engine block. Contact points are 25 amp, 115/230 volts a-c. *Kim Hotstart Mfg.*



Hydraulic Power System (RA-3)

The HS-3000 portable hydraulic system, designed and engineered for portability, high power and low cost, is said to be capable of driving various sizes of hydraulic vibrators. The pump, powered by a 10-hp, 220/440-volt, 3-phase electric motor, is capable of producing up to 1,500 psi at 13 gpm. Reservoir capacity is 22 gallons. The unit is 36 in. long, 27 in. wide, 26 in. high. It is normally supplied with 15 ft of hose. *Martin Engineering Co.*



Engine Preheater (RA-4)

The 2,000-watt, 230-volt Model MB 220 Hotstart water jacket preheater maintains engines at operating temperatures regardless of weather changes. It is designed for installation on gasoline engines of 600- to 1,200-cu-in. displacement and on 4- and 6-cylinder diesels. It operates at 8.3 amp, is 17½ in. long, 3½ in. in diameter, and weighs 7 lb. It is horizontally installed and is available with a companion Kim-Stat thermostatic control. *Kim Hotstart Mfg.*

Self-Locking Nuts (RA-5)

Special, self-locking nuts used to fasten brake shoes to car retarder brake beams are known as Nylok fasteners. The heavy duty 7/8-9 nuts have a nylon plug that compresses and keeps them tight under the most severe shock and vibration conditions. The Nylok nuts have a nylon insert permanently embedded in a hole drilled in the threads. This causes a high-pressure, metal-to-metal engagement of opposite threads. *United Shoe Machinery Corp.*

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PEOPLE IN THE NEWS

ALASKA STEAMSHIP CO.—Rear Admiral W. S. Post, Jr., U.S. Navy, retired, appointed executive vice president and general manager, effective Feb. 1.

ARKANSAS & LOUISIANA MISSOURI.—Clarence H. Dawson named general agent, Houston, Tex.

CANADIAN NATIONAL.—John H. Spicer, manager, Toronto Area, appointed assistant vice president, transportation and maintenance, system, Montreal. **A. Ray Williams,** general manager—customer relations, freight sales department, Montreal, succeeds Mr. Spicer as manager, Toronto Area.

D. G. Brown, piggyback operations controller, appointed to the new position of regional highway co-ordinator, Great Lakes Region, Toronto.

W. H. Cyr, assistant to vice president and general manager, appointed manager, Montreal Area, succeeding **J. F. Roberts** named area manager—special duties, reporting to the vice president, St. Lawrence Region, Montreal. **W. J. Mayo,** operations manager, named assistant area manager, Montreal.

H. S. Martin, system representative air express services, appointed customer service officer, express freight, Great Lakes Region, Toronto.

G. L. Robinson, branch manager freight sales, Hamilton, Ont., appointed branch manager freight sales (West), Toronto Area, succeeding **W. N. Sparrow,** retired.

The title of **G. J. Waque,** supervisor freight train operation, has been changed to regional transportation officer—freight, Great Lakes Region, Toronto.

F. J. Doyle, office assistant, appointed assistant superintendent (administration of office, budgeting, timekeeping, cost control and training units); **M. Cahill,** training instructor, employee relations, appointed assistant to superintendent (personnel and labor relations matters, scheduling and deployment of staff), Great Lakes Region, Toronto.

J. W. G. MacDougall, general solicitor, appointed general counsel, Montreal.

P. L. Schwartz, assistant area freight sales manager, London, appointed assistant area freight sales manager, Toronto, succeeding **R. W. Dodds,** on leave of absence.

Edward A. Svitil, foreign freight agent, New York, appointed general freight agent there, succeeding **Theodore Lucas,** retired. Mr. Svitil is succeeded by **Elmer E. Hoffman.**

D. F. Mills, manager, research services, CN-**Canadian Pacific** Consulting Group, Ottawa, Ont., appointed special projects officer, CN, Great Lakes Region, Toronto.

J. F. Weaver, superintendent transportation, promoted to operations manager, Northern Ontario Area, Capreol. succeeding **R. A. Walker.**

Ralph J. Hansen, manager, Hudson Bay Area, appointed to the new position of deputy chief engineer—system, Montreal. **R. I. Kichler,** assistant engineer, British Columbia Area, appointed assistant transportation engineer, Great Lakes Region, Toronto.

CANADIAN PACIFIC.—J. H. Green, assistant superintendent, Smiths Falls, Ont., transferred to the Laurentian Division, Montreal, succeeding **G. J. DelValle,** transferred.

CHESAPEAKE & OHIO—John J. Woods, Jr., appointed assistant freight traffic manager, Richmond, Va. **Eugene T. Grimes** named assistant general freight agent there.

T. J. Sheehan appointed assistant superintendent—coal piers, Newport News, Va., succeeding **J. W. Martin,** retired.

H. L. Ellis, Jr., assistant trainmaster, Ashland, Ky., promoted to trainmaster, Russell, Ky., succeeding **L. H. Lucas,** retired. **R. L. Myers** appointed terminal trainmaster, Willard, Ohio, succeeding **R. R. Hosmeyer,** named supervisor transportation, Pittsburgh, Pa. to replace **C. W. Calhoun,** on leave of absence. **J. C. McAlarney,** assistant terminal trainmaster, Willard, Ohio, named terminal trainmaster, Lorain, Ohio, succeeding **M. D. Wallace. V. H. Mengle,** assistant trainmaster, Newport News, Va., promoted to trainmaster, Ashland, Ky., succeeding **W. H. Frost,** promoted to assistant superintendent, **Nicholas, Fayette & Greenbrier,** Rainelle, W. Va., replacing the late **R. C. Bishop.**

Edgar A. Long, assistant regional sales manager, Chicago, promoted to regional sales manager there.

CHESAPEAKE & OHIO—BALTIMORE & OHIO.— Appointments at Baltimore: **C. S. Johnson,** superintendent car utilization; **H. L. Conti,** assistant superintendent car utilization; **R. E. Tate,** assistant superintendent car utilization—assigned cars; **T. D. Murphy,** assistant to superintendent car utilization—general service cars; **T. E. Marks,** assistant to superintendent car utilization—coal cars.

John B. King, Jr., systems designer—methods and procedures, Baltimore, appointed car accountant, transportation department, Huntington, W. Va., succeeding **S. L. Morton.**

E. J. Wovas named supervisor station operations, Columbus, Ohio. **J. E. Simonson** appointed supervisor station operations, Cincinnati.

CHICAGO & NORTH WESTERN—I. Robert Ballin, vice president—real estate, elected to the new position of vice-president—materials, procurement and real estate. **S. G. Van Arsdell, Jr.** will continue as director of materials and procurement. **Robert W. Mickey,** assistant manager—real estate, named director of real estate.

John W. Alsop, acting general manager, appointed general manager.

B. C. Allen named assistant vice president-systems design and installation, Chicago. **W. H. Kirwin** appointed manager-on-line operations.

Elmer A. Alexy, acting division freight agent, Peoria, Ill., named division freight agent there.

CHICAGO & WESTERN INDIANA.—Robert H. Snyder appointed superintendent. He was formerly assistant superintendent, **Southern,** Louisville, Ky.

CHICAGO, WEST PULLMAN & SOUTHERN.—Benjamin J. Slowinski named general freight agent, Chicago, to succeed **Carl G. Forsander,** who retires Feb. 28 after 41 years of service.

CLINCHFIELD.—T. J. Britton appointed general industrial agent, Erwin, Tenn.

COTTON BELT.—Wayne L. Bouchard, assistant general agent, Chicago, promoted to general agent there, succeeding **Fred L. Crawford,** who retired Dec. 31 after 40 years service. **Howard E. Hansen** succeeds Mr. Bouchard as assistant general agent.

DELAWARE & HUDSON.—E. M. Dower, track supervisor, Plattsburgh, N.Y., appointed bridge and building supervisor, Oneonta, N.Y., succeeding **J. M. W. Norris,** who retired Jan. 31, after more than 42 years' service. **G. A. Davids** succeeds Mr. Dower.

G. Howard Ingalls appointed assistant division sales manager, Albany. Abolished position of sales representative formerly held by Mr. Ingalls.

I. Robert Ballin
C&NW

Clarence R. Lennig
D&RGW

DENVER & RIO GRANDE WESTERN.—Clarence R. Lennig, assistant vice president, Denver, elected vice president-traffic, to succeed **C. J. Harbeke,** who retired Jan. 31 after more than 32 years of service. **John B. Norwood,** assistant vice president-operations, has become over-all chief of the new Transportation Management Center. Members of the staff include **H. W. Bolton,** manager of transportation; **J. A. Greener, O. W. Geisler** and **M. E. Wood,** assistant managers of transportation; **J. E. Maher,** power scheduler. They were associated with the former Transportation Monitoring Center, now a part of the new department. The former Traffic Service Department has also become part of the TMC and been renamed the Customer Service Bureau. **P. L. Smith** has been named supervisor of the bureau. **Robert Hassels, David Davis** and **Roger Sal Vera** appointed tracing and diversions clerks.

DETROIT & TOLEDO SHORE LINE.—William J. Clifton, general agent, retired Jan. 1, after more than 49 years of service. **George P. Palmer** and **Gordon L. Parr** appointed district sales representatives, Detroit.

ELGIN, JOLIET & EASTERN.—Robert A. Schlueter named freight claim agent, Joliet, Ill., to succeed the late **Frank M. Sitka.**

ERIE LACKAWANNA.—George P. Kirtley appointed assistant regional sales manager, Hoboken, N.J., succeeding **George R. Marr,** who retired Dec. 31. **Robert J. Hill** appointed assistant district sales manager, Detroit.

John E. Hayden, coal freight agent, New York, retired Jan. 1, after more than 41 years service.

Vernon F. Green, central passenger sales manager, Youngstown, Ohio, retired Jan. 1, after more than 35 years' service.

ESSEX TERMINAL.—Murray A. Elder named vice president of this railway as well as of Morton Terminal Limited and Morton Chemical of Canada, Ltd., subsidiaries of Morton Industries of Canada, Ltd. Mr. Elder was formerly director of industrial development, Buffalo Area Chamber of Commerce and executive vice president, Buffalo-Niagara Industrial Development Corp.

FLORIDA EAST COAST.—R. K. Parsons, freight traffic manager, St. Augustine, Fla., retired after 50 years in the railroad industry, 33

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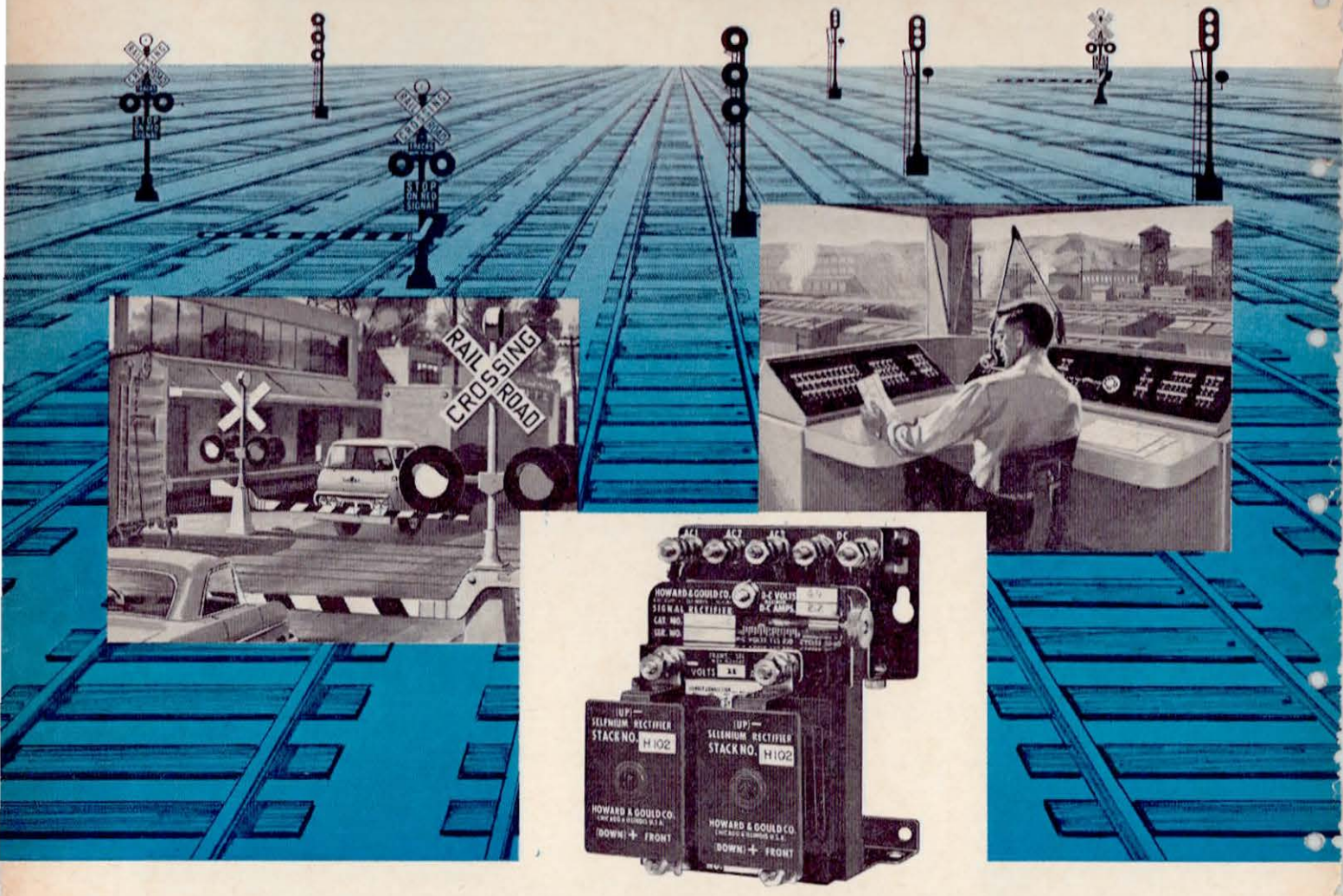

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with the FEC. **C. Davies Meitin,** assistant freight traffic manager, appointed general traffic manager. **Norman L. Gray,** terminal superintendent, Hialeah, named director of personnel. **Milo M. Parker,** assistant general superintendent and safety director, St. Augustine, named transportation superintendent, Miami. **Bernard D. Vlasin,** terminal superintendent at Bowden, near Jacksonville, named transportation superintendent there.

Paul L. Robie, procedure-computer engineer, St. Augustine, named assistant to president. **Roy P. Taylor,** general superintendent of transportation, appointed assistant to **R. W. Wyckoff,** vice president. **Roger J. Barreto,** assistant manager of industrial development, named assistant to **John E. Corbett,** vice president, with headquarters as before at Miami. **James P. Williams,** chief clerk, maintenance of way department, appointed assistant manager of industrial development and real estate. **Robert F. Stack,** trainmaster, Hialeah-Ft. Pierce district, succeeds Mr. Gray as terminal superintendent, Hialeah. **Harry O. Long,** general yardmaster at Bowden, named terminal superintendent there, succeeding Mr. Vlasin. **Frank F. Stuart,** locomotive engineer, New Smyrna Beach, named safety supervisor.

FRISCO.—Ivan R. Estus appointed assistant to president, with headquarters at Miami, Okla. He was formerly president of the **Northeast Oklahoma.** In accordance with an order of the ICC, all properties, rights and franchises of the NEO were taken over by the Frisco on Jan. 1.

ILLINOIS CENTRAL. — Richard K. Osterdock, superintendent, Kentucky division, Paducah, Ky., transferred to the Chicago division. **Marvin E. Corzine,** assistant superintendent, Illinois division, Champaign, Ill., succeeds Mr. Osterdock, and in turn is replaced by **William R. Wardlow,** trainmaster, New Orleans. **R. J. Renton,** assistant trainmaster, New Orleans, succeeds Mr. Wardlow. **Frank J. Duggan,** superintendent, Tennessee division, Memphis, appointed superintendent, Louisiana division, New Orleans. Mr. Duggan's successor is **Ivan B. Hall,** assistant superintendent, Tennessee division. **William G. Bumpus,** trainmaster, Iowa division, Waterloo, Iowa, replaces Mr. Hall, and in turn is replaced by **E. L. Pearson,** assistant trainmaster, Waterloo.

Arthur W. Goettler named industrial development representative. He was formerly director of industrial development, **Chicago Association of Commerce and Industry. Monroe J. Flicker,** general freight agent, Omaha, and **Walter P. Schindel,** general freight agent, Louisville, named regional sales managers. **Walter M. Bowling** and **Charles F. Bahr** named regional sales managers-coal.

Harry C. Miller, assistant general purchasing agent, becomes general purchasing agent.

Sheldon Landy appointed manager, marketing services.

JAPANESE NATIONAL RYS. — Jikai Tsuzuki named a deputy director, North American office, 45 Rockefeller Plaza, New York. He succeeds **Yoshiaki Kawagoe,** deputy director since April, 1964, who has returned to Tokyo. Mr. Tsuzuki was formerly director of JNR's Finance Department, Nagoya Division.

JERSEY CENTRAL.—James C. Warren appointed assistant chief engineer, Jersey City, N.J. Mr. Warren's previous positions included those of chief construction engineer with Ford, Bacon & Davis; transportation consultant for Coverdale & Colpitts; and general superintendent, Hudson & Manhattan (now Port Authority Trans-Hudson Corp.).

KANSAS CITY SOUTHERN.—G. E. Kellogg named auditor of revenues, succeeding **R. H. Booth,** who retired Feb. 1.

LEHIGH & HUDSON RIVER.—Philip S. Campbell, acting superintendent, Warwick, N.Y., appointed superintendent.

Robert J. Pierce, general agent, appointed general freight agent, remaining at Cleveland, Ohio. **Robert E. Farrell** named general agent, Chicago.

LEHIGH VALLEY.—William G. Creasby appointed district freight agent, Indianapolis, Ind. **Matthew M. Donovan** named general agent, Cincinnati, Ohio.

Jerome P. Daun named district freight agent, Portland, Ore.

LOUISVILLE & NASHVILLE.—James J. Walsh, freight traffic agent, Chicago, named district freight agent. **C. D. Bowman,** cost analyst, cost accounting and budgets department, Louisville, appointed senior cost analyst. **D. A. Stallings,** inspector special services, Evansville, Ind., named assistant to director special services, Louisville. **C. B. Godwin,** assistant inspector special services, Montgomery, Ala., becomes supervisor loss and damage prevention, Atlanta. **J. B. Greenfield,** assistant inspector special services, New Orleans, named supervisor loss and damage prevention.

MILITARY TRAFFIC MANAGEMENT & TERMINAL SERVICE.—Hugh C. Gray, special assistant to the Commander, retired Dec. 30.

Army **Col. Clifford C. Reynolds, Jr.,** appointed director of research and systems, Washington, D.C. Before joining MTMTS Col. Reynolds was chief, Movements Division, Headquarters, U.S. Army Europe, Heidelberg.

MILWAUKEE.—W. Edward Cartwright, assistant general foreign freight agent, named to the newly created position of manager of forest products sales.

MISSOURI PACIFIC.—J. L. James, assistant superintendent, Memphis, Tenn., appointed terminal superintendent, Little Rock Terminal division, North Little Rock, Ark. **H. E. Handley,** trainmaster, Omaha, succeeds Mr. James, and in turn is replaced by **K. M. Converse. R. E. Heath,** assistant trainmaster, Hearne, Tex., advanced to trainmaster, TP-MP Terminal Railroad of New Orleans & Lower Coast, with headquarters at Avondale, La.

MISSOURI PACIFIC-TEXAS & PACIFIC.—D. L. Corey named director of auditing, and **J. J. DuRocher,** manager of auditing, both at St. Louis.

NORFOLK SOUTHERN.—H. A. Shamblin, construction engineer, Raleigh, N.C., appointed assistant chief engineer—structures there and his former position abolished.

RICHMOND, FREDERICKSBURG & POTOMAC.—R. L. Tyson, Jr., assistant supervisor, appointed supervisor bridges and buildings—systems, Fredericksburg, Va.

J. R. Holladay, Jr., assistant freight traffic manager—sales, promoted to freight traffic manager—sales, Richmond.

Paul Hendrickson, general agent, Charlotte, N.C., appointed general agent—sales, Richmond.

Freight and Passenger Car Charts

These charts are very helpful to AAR billing clerks, mechanical engineers, purchasing and stores personnel, car inspectors, write-up men, car foremen, and anyone else who needs a knowledge of car parts and their relation to each other.

The charts include a cutaway diagram of the car and a listing of important parts with arrows showing where each is located. These charts are a part of standard training programs used on a number of major railroads.

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- ☐ Box car, AAR standard **(23x25 inches)**
- ☐ **Air conditioned chair car, 1930 design** (18 x 29 inches)
- ☐ Tank Car (23 x 35 inches)
- ☐ **Refrigerator Car, wood sheathed, steel** underframe, 1920 design (16 x 22 inches)

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Linde

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Vapor

SUPPLY TRADE

D. Gregg Cummings, assistant advertising manager, **Electro-Motive Division** of **General Motors,** has been advanced to advertising manager. **Gordon A. Sinclair,** senior staff assistant in public relations, named to the newly established position of manager of press and community relations.

Norman Swift, manager of corporate public relations and advertising, **Midland-Ross Corp.,** Cleveland, has been appointed to the newly created position of manager of corporate communications. **James M. Sweeney,** advertising manager, National Castings Division, has been named manager of corporate advertising.

B.A. Proctor has been appointed general manager, Central Marketing Department, **Linde Division, Union Carbide Corp.,** New York. **D.G. Bol** and **W.B. Porter** have been named assistant managers—marketing. **R.H. Bennewitz** has been appointed manager, Railroad Products Department, Chicago. **C.S. Richmond** has been named manager—Welding Supply Distributor Department, New York.

Mr. Proctor was formerly manager, Distributor Products Dept.; Mr. Bol was manager of sales promotion and Mr. Richmond was Chicago Region manager of that department.

Mr. Porter was previously Eastern Region manager, Railroad Products Department, New York, and Mr. Bennewitz was sales manager of railroad products at Chicago.

Marshal Miles has joined **Vapor Corp.,** Chicago, as assistant chief engineer, Railroad and Transit Division. Mr. Miles was formerly chief engineer, new products department, Stewart Warner Corp.

OBITUARY

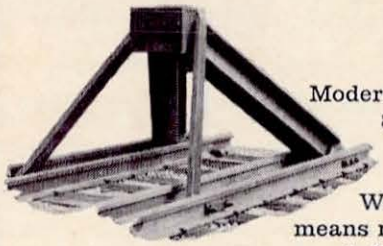
Howard E. Hayes, sales representative, **Cardwell Westinghouse Co.** and **Universal Railway Devices Co.,** Chicago, died Feb. 2.

W. A. Pope, retired mechanical superintendent, **American Refrigerator Transit Co.,** died Feb. 1 in St. Louis, Mo.

Paul R. Suhr of the Mechanical Department, **Cardwell Westinghouse Co.,** Chicago, died Feb. 5 at Phoenix, Ariz.

Arnold W. Peterson, 64, retired supervisor of freight train service, **Illinois Central,** died Feb. 8 in Illinois Central Hospital, Chicago.

Hayes **ALL-STEEL Bumping Posts**



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MARKET OUTLOOK

Carloadings

Loadings of revenue freight in the week ended Feb. 11 totaled 499,811 cars, the Association of American Railroads announced on Feb. 16. This was a decrease of 19,868 cars, or 3.8%, compared with the previous week; a decrease of 34,539 cars, or 6.5%, compared with the corresponding week last week; and a decrease of 12,771 cars, or 2.5%, compared with the equivalent 1965 week. Ton-miles generated by carloadings in the week ended Feb. 11 are estimated at 13.4 billion, a decrease of 1.5% below the corresponding week of 1966, and 10.2% above the 1965 week.

REVENUE FREIGHT CARLOADINGS
For the week ended Saturday, Feb. 11

District	1967	1966	1965
Eastern, including Allegheny and Pocahontas ..	192,133	215,684	213,899
Southern	109,542	113,439	107,706
Total Eastern and Southern Districts	301,675	329,123	321,605
Northwestern .	56,479	60,448	56,789
Central Western	103,889	105,876	100,673
Southwestern .	37,768	38,903	33,515
Total Western Districts	198,136	205,227	190,977
Total All Roads	499,811	534,350	512,582
Commodities:			
Grain and Grain products	48,957	56,407	43,324
Livestock	1,121	1,438	1,585
Coal	105,500	106,351	101,729
Coke	7,153	9,061	9,006
Forest Products	37,287	38,646	35,905
Ore	16,840	16,908	16,149
Merchandise l.c.l.	4,865	6,872	9,968
Miscellaneous .	278,088	298,667	294,916
Feb. 11	499,811	534,350	512,582
Feb. 4	519,679	487,617	501,186
Jan. 28	526,637	513,503	527,826
Jan. 21	528,264	536,387	522,746
Jan. 14	542,193	544,556	532,367
Cumulative total, 6 weeks	3,068,041	3,124,695	3,127,765
Estimated revenue ton-miles (billions) 6 weeks	80.7	79.5	74.3

PIGGYBACK CARLOADINGS.—U. S. piggyback loadings for the week ended Feb. 4 totaled 21,138 cars, carrying 34,881 trailers, compared with 20,098 cars, carrying 32,963 trailers, in the corresponding 1966 week. Loadings for 1967 up to Feb. 4 totaled 104,282 cars, carrying 167,603 compared with 97,031 cars, carrying 158,608 trailers, in the corresponding period of 1966.

IN CANADA—Carloadings for the ten-day period ended Jan. 31 totaled 96,804 cars, compared with 70,981 for the previous seven-day period, according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Totals Cars Rec'd from Connections
Totals for Canada		
Jan. 31, 1967.....	96,804	34,294
Jan. 31, 1966.....	91,090	33,955
Cumulative Totals		
Jan. 31, 1967.....	301,882	103,213
Jan. 31, 1966.....	294,402	103,088

FREIGHT TRAIN CARS

► *January Bad Order Ratio 0.5% Lower Than Last Year.*—Class I roads on Jan. 1 owned 1,496,579 freight cars, 16,009 more than on Jan. 1, 1966, according to AAR report summarized below. Bad Order Ratio was 0.5% lower than on Jan. 1, 1966.

	Jan. 1, 1967	Jan. 1, 1966	Change
Car ownership	1,496,579	1,480,570	+16,009
Waiting repair	71,376	78,111	— 6,732
Repair ratio	4.8%	5.3%	— 0.5%

NEW FACILITIES

► *Missouri Pacific.*—Opened a terminal complex adjacent to its Settegast Yard in Houston, Texas, which will double its freight-handling capability at this site, and speed up small parcel shipments in particular. Included in the project are a new 1,000-ft-long terminal building, modernization of an older terminal building, installation of an automated freight handling system, construction of a two-story office building, new piggyback facilities and trailer parking lots. The piggyback facility includes a double-entry piggyback ramp, six rail service tracks with a capacity of 48 flat cars, catwalks and all-weather lighting. At the refurbished part of the complex, a double track has a capacity of 18 freight cars, and two adjacent parking lots have a capacity of 173 trucks or trailers.

► *Northern Alberta Railway.*—With NAR going into the third year of its five-year upgrading program, the current big push is in communications. Reports from Edmonton are that all NAR trains, yard engines and maintenance of way gangs will be equipped with radio telephones this year. Earlier, a new communications building was built at McLennan, and Lac La Biche headquarters was enlarged and new switching and power equipment installed. Between Barrhead and Westlock, a new radio link is being used for train dispatching and commercial communication. In other developments, the 1966 upgrading phase involved 102 miles of ballasting, 60 miles of ditching and 65 miles of bank widening; the 1967 phase will include another 110 miles of ballasting, 16 miles of ditching and 103 miles of bank widening.

► *Pennsylvania.*—Is building a $2.3 million six-mile spur line to the site of a new coal-burning generating station, to be built by Potomac Electric Power at Morgantown, Md., about 40 miles south of Wash., D.C. The spur is due for completion early this summer, and will be used for unit-train haulage of coal. PRR already serves Potomac Electric Power's Chalk Point plant in a similar way, over the Pope's Creek branch.

► *Port Authority-Trans Hudson Corp.*—Awarded a $590,000 contract to Davidson Electric for installation of four silicon rectifiers in PATH's Christopher St. substation, new auxiliary power cables, fluorescent lighting at three stations, and splicing of 7,000 ft of 27,000-volt three-unit power cable. Work is scheduled for completion by the end of 1967.

YOU OUGHT TO KNOW

TOFC suppliers organize: Almost overnight, as such things go, another major organization of suppliers has taken shape—the Allied Industry Section of the National Railroad Piggyback Association. From nothing, the section has grown to be a 50-member organization, and officers of the group think they may eventually have about 80 participating companies. J. H. Dolan, Brown Trailer Division of Clark Equipment, is president, with H. C. Eyler, White Trucks, as vice president. Other directors are Constantine Alimanestiano, General American; R. E. Kieran, Xtra; G. E. Williams, Dayton Tire & Rubber; Jack Sell, Transicold; and A. D. McCombs, Trailmobile. Main purposes of the group are to promote a closer relationship between TOFC operators and suppliers and to aid in providing technical and other information as needed and requested by NRPA.

Putting a price on NH: With takeover of the New Haven by the Penn-Central still stalled by litigation, the road's future is unsettled as long as parties involved cannot agree on value of physical assets. NH Trustee William T. Kirk, the road's windup witness at ICC hearings, presented the NH's own estimate in a two-step plan involving (a) sale to Penn-Central, (b) distribution of NH assets to claimants to an interest in the estate. Assuming certain technical conditions, Kirk put the value to NH stockholders of assests conveyed to Penn-Central at $131 million; if values of assets not conveyed are added in, the total would be $156 million. Consummation of the Penn-Central merger is still tied up in the courts, meanwhile.

Changing safety equipment: The ICC has revised its instructions for applications to change railroad safety equipment, under Section 25 of the Interstate Commerce Act. It concerns applications for discontinuance or modification of the installation of block signal systems, interlocking, traffic control systems, and automatic train stop, train control or cab signal systems. The revisions, effective Feb. 15, are being made to provide carriers with a better understanding and a clearer interpretation of what constitutes a material modification for which an application is required. Applications must now be filed with the Secretary's office instead of the Bureau of Railroad Safety and Service, and notice of the filings is required to the state and labor unions involved.

January fines totaled $54,850; Fines totaling $54,850 were paid in January by 38 railroads for 210 violations of the Safety Appliance, Locomotive Inspection, Hours of Service and Explosives and Other Dangerous Articles acts. Biggest payer, according to the ICC, was the Baltimore & Ohio, $8,000. Next, in turn, came New Central, $4,000; Northern Pacific, $3,750, and Pennsylvania, $3,200.

Seaway sets a record: Traffic in both sections of the St. Lawrence Seaway set new records during the 1966 navigation season. More than 49.2 million tons of cargo moved through the Montreal-Lake Ontario section, a rise of 13.5% above the 1965 total. Welland section traffic exceeded 59.4 million tons, 10.9% over the total in 1965. The traffic increase is attributed to bulk cargoes, which rose by almost 6 million tons in both sections.

Not quite unanimous: One final note (hopefully) on the great Chicago snowstorm of late January: Not everybody was fully satisfied with the performance of rail-based mass-transit systems. A group of Chicago South Shore & South Bend commuters is asking the ICC for an investigation of safety and service. CSS&SB did suspend operations for a time during the big storm (RA, Feb. 6, p. 27) while other roads didn't have it quite so bad. And apparently this, plus difficulties in operation on post-storm days, provoked a group of commuters to take action to get their grievances out into the open in a public forum.

Truck tonnage: Intercity truck tonnage in the week ended Feb. 4 was 5.7% above that of the previous week and 2.7% above the volume in the corresponding week of 1966, according to American Trucking Associations.

Current statistics

Net Income	
9 mos., 1966	$658,000,000
9 mos., 1965	542,000,000
Carloadings, revenue freight	
6 wks., 1967	3,068,041
6 wks., 1966	3,124,695
Freight cars on order	
Jan. 1, 1967	56,618
Jan. 1, 1966	44,297
Freight cars delivered	
12 mos., 1966	89,892
12 mos., 1965	77,861
Serviceable cars	
Jan. 1, 1967	1,425,203
Jan. 1, 1966	1,402,459

ICC orders "Zephyr" runs for a year

Well patronized—but still a money loser—the "California Zephyr" is a problem to both Western Pacific and the ICC.

Which is more important, retaining a popular rail passenger service, or justifying it economically? The Interstate Commerce Commission will mull that one over during the coming year, in the case of the "California Zephyr."

The train involved is No. 17 westbound and No. 18 eastbound between Chicago and San Francisco. WP handles the segment between Salt Lake City and San Francisco, and the train has long been a darling of tourists for its scenic route through the Rockies and Sierra Nevada.

WP sought to discontinue its portion of the service—the only passenger trains it has left—by September of last year. The Commission, however, ordered it continued through January 1967, pending an investigation. The time was extended to February, and now the Commission, in Finance Docket No. 24277, has ordered WP to continue operation for at least another year, pending still further investigation.

The two other roads involved in the through service of the "California Zephyr" are the Burlington (between Chicago and Denver) and the Rio Grande (between Denver and Salt Lake City). In ordering continuance for another year. the Commission expressed concern that abandonment by the WP might trigger similar moves by the other two roads. It also said that several adjustments might be looked into during the course of the year, including self-help measures, and a possible change in joint division of fares and charges, if found to be inequitable.

• **Spiralling losses.** The WP has warned for the last two years that mounting deficits might force it to give up the service. Operating losses were listed by the WP as $497,300 in 1964, $816,700 in 1965, and $502,700 in the first six months of 1966.

Consultants for the WP not following the ICC basis of accounting found the 1964 and '65 deficits to be $349,400 and $700,400 respectively.

Mail traffic never figured prominently but express revenues, which once did, have taken a beating: WP gave express revenues as $121,500 in 1964, $102,100 in 1965, and $31,300 for the first six months of 1966.

REA Express terminated both through and local service on this route during 1966.

• **A novel case.** What makes this case unusual is that there is no question of a drop in traffic: In 1950, the number of passengers totaled 138,588, and in 1965 came to 135,553. During the years in between, the number of riders remained roughly the same.

The Commission called this "unique," and said, "No case decided under Section 13A of the Act is an authoritative precedent permitting or not permitting discontinuance of these trains."

The ICC went on: "The 'California Zephyr' operates at virtually full capacity during the summer vacation season. For the full year 1965, the daily average number of passengers was 78% of capacity."

• **'Tops' with riders.** The Commission also called the case exceptional because there was practically no complaint from protestants about quality of service. "Most of them stated that the equipment was satisfactory, the employees very helpful, dining facilities adequate, and that their trips were comfortable."

During the last five years, the ICC report observed, "revenues remained almost the same. Losses in operation of the trains began in 1956 and have increased since that time, due to increased costs of pullman-car operations, car repairs, locomotive repairs, and materials and supplies."

On an avoidable-cost basis, the projected 1967 passenger operating deficit is $560,000. But, the Commission thought, this doesn't show the true dimensions of the problem: "Maintenance and major repair costs will mount as the equipment used . . . approaches the age of retirement."

"Western Pacific estimated that the cost of renovating, rebuilding and modernizing its passenger cars and replacing old locomotives would range from $2.8 million to $4.3 million." To replace passenger equipment would mean that the railroad would have to spend an additional $9 million.

The ICC lauded WP for its willingness to live up to obligations in hauling passengers, indicated a need to wait and see how its proposed measures will affect the picture this year, and held out this as a long-term prospect: "WP should not be required to continue its diligent efforts to promote such service beyond the time when reasonable hopes for preserving it cease to exist." ■

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SPECIFICATIONS: University degree in Civil Engineering preferred, equivalent experience acceptable; minimum 10 years experience in maintenance of main line track, roadbeds, switch installations on class I railroads, including two years experience as Supervisor or Road Master; experience in operations of American Association of Railways Magnetic Rail Flaw Detection Car; working knowledge of Spanish desirable.

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VIEWPOINT

It takes two to negotiate

Without much doubt, this is the era of the third party—the age of mediation, at the very least.

Nobody would think of holding a sports event without a personage called referee or judge or umpire. If you get into an argument with your neighbor, if you think he's building his fence on your land, a friendly judge will tell you who's right. If you are involved in an auto accident, your insurance company fights it out with his insurance company and judge or jury decides what to do. If you get into a brawl with your wife, like as not you can find a mother-in-law to settle things.

Three's a crowd, sometimes

In these times, about the only things settled in direct and head-to-head meetings between the parties are war and labor contracts. And, while nobody could argue with third-party intervention to prevent shooting, a lot of people think that outsider influence—call it interference if you want—may be going too far in the management-labor field.

This theory — that employers and employees should settle their own differences—is by no means universally held. There are those in management, including railroad management, who might be willing to take their chances with arbitration as a general thing. There are those in labor, including railroad labor, who seem to prefer the "advisory" form of third-party intervention as a way of (a) getting more than they could in bargaining and (b) getting still more by using the third-party "advice" as a new bargaining platform.

But there are also those on both sides of the table who regard the trend—and it is that—to third-party settlements as a potentially dangerous one. They wish both sides would wake up and work to avoid the all-around hazards of imposed agreement.

One of the more thoughtful comments on the state of management-labor relations came recently from a vice president of General Electric, Virgil B. Day. He didn't waste time beating around bushes. Free collective bargaining today, he believes, is in trouble—and there are certain things that both government and the parties can do to improve the situation.

Day points to several situations as indicative of the problem. He cites an increase in the frequency and seriousness of national-emergency and "public-inconveniencing" strikes. He sees a pattern of refusal by local organizations or individuals to ratify agreements negotiated by national union officers. He points to the talk of legislation to curb strikes and to a "generally rising public indignation and loss of public confidence in the collective-bargaining process."

Day is a refreshing type. He says such things as this: "It is obvious that if either party sees a profit in provoking interventions, it must first demonstrate that there will be no settlement without intervention. This means that the ready availability of intervention encourages all the wrong things on the part of negotiators—militancy, saber-rattling, ritual play-acting and unrealistic positions. The significant point is that, in such cases, the machinery for reaching agreement is not breaking down because it is inadequate but precisely because effort is really directed at not reaching agreements, so as to provoke intervention that is presumed to be politically helpful in reaching the objectives of one party or another."

Bargaining from strength

As for possible avenues for solution, GE's vice president has suggestions, in both the public and the private sector. So far as railroads are concerned at this point, perhaps his comments on "private policy" deserve prime attention. In short, Day shows a four-point program: (1) He proposes an opening-up of the channels of mutual understanding between company and union people; (2) he advocates full communication to employees, at all times, by both management and union; (3) for management, he suggests a need for "more resolution and more responsibility" in defending public-interest solutions to disputes, in taking strong stands against excessive demands, in communicating management positions on the real issues at stake; and (4) he proposes the seeking of broader public support for responsible positions.

In recent months, the railroad management-labor story has been one of part-harmony, part-discord. Current conditions, in comparison with those of a few years ago, are improved. Settlements—some of them—are being made without intervention by third parties. But nobody, really, forgets the work-rules dispute, and everything that went with it. Hardly anybody, deep down, wants that to happen again.

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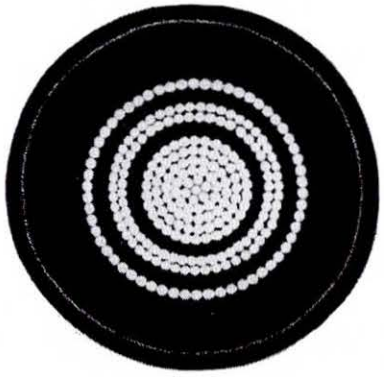

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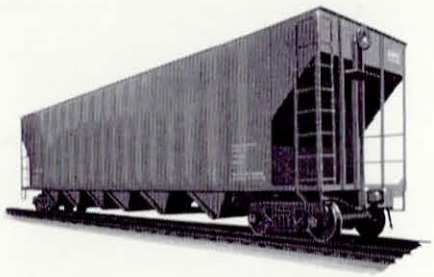

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